

101.311-24/04 – including *Taq* pol., IFU-01
 101.311-24u/04u – without *Taq* pol., IFU-02

Visit www.olerup.com for
 “Instructions for Use” (IFU)

Lot No.: **7F7**

Lot-specific information
Olerup SSP® DPB1

Product number:	101.311-24/04 – including <i>Taq</i> pol. 101.311-24u/04u – without <i>Taq</i> pol.
Lot number:	7F7
Expiry date:	2020-07-01
Number of tests:	24 tests – Product No. 101.311-24/24u 4 tests – Product No. 101.311-04/04u
Number of wells per test:	95+1
Storage - pre-aliquoted primers:	dark at -20°C
- PCR Master Mix:	-20°C
- Adhesive PCR seals	RT
- Product Insert	RT

This Product Description is only valid for Lot No. 7F7.

Complete product documentation consists of generic Instructions for Use (IFU), lot specific Product Insert, Worksheet and Certificate.

CHANGES COMPARED TO THE PREVIOUS OLERUP SSP® DPB1 Lot (9E3)

The DPB1 kit is updated to enable separation of:

- Confirmed DPB1 alleles as listed in the IMGT/HLA database¹
- Polymorphisms in exons outside of the region encoding the peptide binding domain
- Null and Alternatively expressed alleles

The format of the Worksheet has been changed.

¹As described in section Uniquely Identified Alleles.

The DPB1 specificity and interpretation tables have been updated for the DPB1 alleles described since the previous *Olerup SSP®* DPB1 lot was made (**Lot No. 9E3**). The kit design is based on IMGT/HLA database 3.29.0.

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The primers of the wells detailed below have been exchanged, added or modified compared to the previous lot.

Well	5'-primer	3'-primer	rationale
10	-	Added	3'-primer added for increased yield of the DPB1*02:01:04 allele.
12	-	Added	3'-primer added for increased yield of the DPB1*02:01:04 allele.
15	Modified	-	5'-primer modified for improved HLA-specific amplification.
26	-	Added	3'-primer added for increased yield of the DPB1*46:01:02 allele.
27	Modified	-	5'-primer modified for improved HLA-specific amplification.
38	-	Added	3'-primers added for the DPB1*657:01N allele.
40	Added	-	5'-primer added from well 77 for improved HLA-specific amplification.
44	Removed	Modified	3'-primer modified for improved HLA-specific amplification.
49	Added	-	5'-primer added for the DPB1*522:01 allele.
53	-	Added	3'-primer added for the DPB1*573:01 allele.
54	-	Added	3'-primer added for the DPB1*04:01:01:24N allele.
56	-	Added	3'-primer added for the DPB1*658:01 allele.
59	Added	-	5'-primer added for increased yield.
64	-	Added	3'-primer added for the DPB1*658:01 allele.
65	-	Added	3'-primer added for the DPB1*604:01 allele.
67	-	Added	3'-primers added for the DPB1*504:01 and DPB1*657:01N alleles.
68	Added	-	5'-primer added for the DPB1*522:01.
69	Added	-	5'-primer added for the DPB1*520:01 allele.
70	Added	-	5'-primer added for the DPB1*522:01.
74	Added/modified	-	Added modified 5'-primer from well 84.
76	Added	-	5'-primer added for the DPB1*523:01 allele.
77	Moved, modified	-	5'-primer moved to well 40 and 5'-primer modified for improved HLA-specific amplification.
78	Added	-	5'-primer added for the DPB1*523:01 allele.
84	-	Moved/modified	3'-primer moved/modified to well 74 for improved HLA-specific amplification.
86	Added	-	5'-primer added for the DPB1*520:01 allele.
93	Added	-	5'-primer added for the DPB1*661:01N allele.
94	-	Added	3'-primer added for the DPB1*486:01 allele.

Change in revision R01 compared to R00:

1. Primer mix 53 does not amplify the *163:01 allele. This has been corrected in the Specificity and Interpretation Tables.

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Well **96** contains Negative Control primer pairs, that will amplify more than 95% of the *Olerup SSP®* HLA Class I, DRB, DQB1, DPB1 and DQA1 amplicons as well as all the amplicons generated by the control primer pairs matching the human growth hormone gene.

HLA-specific PCR product sizes range from 75 to 200 base pairs.
The PCR product generated by the positive control primer pair is 430 base pairs.

Length of PCR product	105	200	105	80	75	80	85
5'-primer¹	164	340	440	45	45	43	36
	5'-CAC ^{3'}	5'-Agg ^{3'}	5'-TTA ^{3'}	5'-Tgg ^{3'}	5'-Tgg ^{3'}	5'-Tgg ^{3'}	5'-TAC ^{3'}
							36
							5'-TAT ^{3'}
3'-primer²	231	2nd I	507	59	58	57	47
	5'-TgC ^{3'}	5'-AAA ^{3'}	5'-TTg ^{3'}	5'-CTC ^{3'}	5'-ggC ^{3'}	5'-CTC ^{3'}	5'-ACA ^{3'}
							48
							5'-gCA ^{3'}
							48
							5'-gCC ^{3'}
							52
							5'-TgT ^{3'}
A*	+	+	+				
B*	+	+	+				
C*	+	+	+				
DRB1				+	+		
DRB3				+	+		
DRB5				+			
DQB1					+		
DPB1						+	
DQA1							+

¹The nucleotide position for HLA class I genes and the codon for HLA class II genes, in the 2nd or 3rd exon, matching the specificity-determining 3'-end of the primer is given. Nucleotide and codon numbering as on the www.ebi.ac.uk/imgt/hla web site. The sequence of the 3 terminal nucleotides of the primer is given.

²The nucleotide position for HLA class I genes and the codon for HLA class II genes, in the 2nd or 3rd exon or the 2nd intron, matching the specificity-determining 3'-end of the primer is given in the anti-sense direction. Nucleotide and codon numbering as on the www.ebi.ac.uk/imgt/hla web site. The sequence of the 3 terminal nucleotides of the primer is given.

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Lot-specific information

PRODUCT DESCRIPTION

DPB1 SSP typing

CONTENT

The primer set contains 5'- and 3'-primers for identifying the DPB1*01:01 to DPB1*664:01 alleles.

PLATE LAYOUT

Each test consists of 96 PCR reactions in a 96 well cut PCR plate.

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48
49	50	51	52	53	54	55	56
57	58	59	60	61	62	63	64
65	66	67	68	69	70	71	72
73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88
89	90	91	92	93	94	95	NC

The 96 well cut PCR plate is marked with ‘DPB1’ in silver/gray ink.

Well No. 1 is marked with the Lot No. ‘7F7’.

Wells 1 to 95 – DPB1 high resolution primers.

Well 96 – Negative Control (NC).

A faint row of numbers is seen between wells 1 and 2 or wells 7 and 8 of the PCR trays. These stem from the manufacture of the trays, and should be disregarded. The PCR plates are heat-sealed with a PCR-compatible foil.

INTERPRETATION

Only DPB1 alleles will be amplified by the DPB1 typing kit. Thus, the interpretation of DPB1 typings is not influenced by the DPB2 gene or other HLA class II genes.

For further details see Specificity Table.

UNIQUELY IDENTIFIED ALLELES

All the DPB1 alleles, i.e. **DPB1*01:01 to DPB1*664:01 alleles**, recognized by the HLA Nomenclature Committee in August 2017^{1,2} will be amplified by the primers in the DPB1 subtyping kit.

The DPB1 kit enables separation of the confirmed DPB1 alleles as listed in the IMGT/HLA database. An HLA allele is listed as confirmed by IMGT/HLA if it has been sequenced by more than a single laboratory or from multiple sources. Current allele confirmation status for DPB1 alleles is listed below.

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Lot-specific information

The DPB1 kit also enables identification of polymorphisms in exons outside of the region encoding the peptide binding domain and of null and alternatively expressed alleles.

The following DPB1 alleles can be distinguished by the different sizes of the HLA-specific PCR product:

Alleles	Primer mix	Alleles	Primer mix
DPB1*32:01, 339:01	42	DPB1*237:01, 419:01	85
DPB1*120:01N, 453:01, 521:01	44	DPB1*250:01, 268:01	71
DPB1*153:01, 321:01	53	DPB1*281:01, 591:01	81

¹DPB1 alleles listed on the IMGT/HLA web page 2017-August-10, release 3.29.0, www.ebi.ac.uk/imgt/hla.

²Alleles that have been deleted from or renamed in the official WHO HLA Nomenclature up to and including the last IMGT/HLA database release can be retrieved from web page <http://hla.alleles.org/alleles/deleted.html>.

RESOLUTION IN HOMO- AND HETEROZYGOTES

Results file with resolution in DPB1 homo- and heterozygotes is available upon request.

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ALLELE CONFIRMATION STATUS

Allele	Status ¹	Allele	Status ¹	Allele	Status ¹	Allele	Status ¹
DPB1*01:01:01:01	Confirmed	DPB1*02:01:10	Unconfirmed	DPB1*04:01:01:16	Unconfirmed	DPB1*04:02:01:07	Unconfirmed
DPB1*01:01:01:02	Confirmed	DPB1*02:01:11	Confirmed	DPB1*04:01:01:17	Unconfirmed	DPB1*04:02:01:08	Unconfirmed
DPB1*01:01:01:03	Confirmed	DPB1*02:01:12	Confirmed	DPB1*04:01:01:18	Confirmed	DPB1*04:02:01:09	Unconfirmed
DPB1*01:01:01:04	Unconfirmed	DPB1*02:01:13	Confirmed	DPB1*04:01:01:19	Unconfirmed	DPB1*04:02:02	Unconfirmed
DPB1*01:01:02:01	Confirmed	DPB1*02:01:14	Unconfirmed	DPB1*04:01:01:20	Confirmed	DPB1*04:02:03	Confirmed
DPB1*01:01:02:02	Unconfirmed	DPB1*02:01:15	Confirmed	DPB1*04:01:01:21	Confirmed	DPB1*04:02:04	Unconfirmed
DPB1*01:01:01:03	Unconfirmed	DPB1*02:01:16	Unconfirmed	DPB1*04:01:01:22	Confirmed	DPB1*04:02:05	Confirmed
DPB1*01:01:04	Unconfirmed	DPB1*02:01:17	Unconfirmed	DPB1*04:01:01:23	Unconfirmed	DPB1*04:02:06	Unconfirmed
DPB1*01:01:05	Unconfirmed	DPB1*02:01:18	Confirmed	DPB1*04:01:01:24N	Unconfirmed	DPB1*04:02:07	Confirmed
DPB1*01:01:06	Unconfirmed	DPB1*02:01:19	Unconfirmed	DPB1*04:01:01:25	Unconfirmed	DPB1*04:02:08	Unconfirmed
DPB1*02:01:02:01	Confirmed	DPB1*02:01:20	Unconfirmed	DPB1*04:01:01:26	Unconfirmed	DPB1*04:02:09	Unconfirmed
DPB1*02:01:02:02	Confirmed	DPB1*02:01:21	Unconfirmed	DPB1*04:01:02	Unconfirmed	DPB1*04:02:10	Unconfirmed
DPB1*02:01:02:03	Confirmed	DPB1*02:02:01:01	Confirmed	DPB1*04:01:03	Confirmed	DPB1*05:01:01:01	Confirmed
DPB1*02:01:02:04	Confirmed	DPB1*02:02:01:02	Confirmed	DPB1*04:01:04:01	Confirmed	DPB1*05:01:01:02	Unconfirmed
DPB1*02:01:02:05	Confirmed	DPB1*02:02:01:03	Unconfirmed	DPB1*04:01:04:02	Unconfirmed	DPB1*05:01:01:03	Unconfirmed
DPB1*02:01:02:06	Confirmed	DPB1*02:02:01:04	Unconfirmed	DPB1*04:01:05	Unconfirmed	DPB1*05:01:01:04	Confirmed
DPB1*02:01:02:07	Confirmed	DPB1*02:02:01:05	Unconfirmed	DPB1*04:01:06	Confirmed	DPB1*05:01:01:05	Unconfirmed
DPB1*02:01:02:08	Confirmed	DPB1*02:02:01:06	Unconfirmed	DPB1*04:01:07	Confirmed	DPB1*05:01:01:06	Unconfirmed
DPB1*02:01:02:09	Confirmed	DPB1*02:02:01:07	Unconfirmed	DPB1*04:01:08	Confirmed	DPB1*05:01:01:07	Unconfirmed
DPB1*02:01:02:10	Confirmed	DPB1*03:01:01:01	Confirmed	DPB1*04:01:09	Confirmed	DPB1*05:01:01:08	Unconfirmed
DPB1*02:01:02:11	Confirmed	DPB1*03:01:01:02	Confirmed	DPB1*04:01:10	Confirmed	DPB1*05:01:01:09	Unconfirmed
DPB1*02:01:02:12	Confirmed	DPB1*03:01:01:03	Confirmed	DPB1*04:01:11	Confirmed	DPB1*05:01:02	Unconfirmed
DPB1*02:01:02:13	Unconfirmed	DPB1*03:01:01:04	Unconfirmed	DPB1*04:01:12	Confirmed	DPB1*05:01:03	Confirmed
DPB1*02:01:02:14	Unconfirmed	DPB1*03:01:01:05	Unconfirmed	DPB1*04:01:13	Confirmed	DPB1*05:01:04	Unconfirmed
DPB1*02:01:02:15	Unconfirmed	DPB1*03:01:01:06	Unconfirmed	DPB1*04:01:14	Confirmed	DPB1*05:01:05	Unconfirmed
DPB1*02:01:02:16	Unconfirmed	DPB1*03:01:01:07	Unconfirmed	DPB1*04:01:15	Confirmed	DPB1*05:01:06	Unconfirmed
DPB1*02:01:02:17	Unconfirmed	DPB1*03:01:01:08	Unconfirmed	DPB1*04:01:16	Confirmed	DPB1*05:01:07	Unconfirmed
DPB1*02:01:02:18	Unconfirmed	DPB1*03:01:01:09	Unconfirmed	DPB1*04:01:17	Unconfirmed	DPB1*06:01:01:01	Confirmed
DPB1*02:01:02:19	Unconfirmed	DPB1*03:01:02	Unconfirmed	DPB1*04:01:18	Unconfirmed	DPB1*06:01:01:02	Confirmed
DPB1*02:01:02:20	Unconfirmed	DPB1*03:01:03	Unconfirmed	DPB1*04:01:19	Unconfirmed	DPB1*06:01:01:03	Unconfirmed
DPB1*02:01:02:21	Unconfirmed	DPB1*03:01:04	Confirmed	DPB1*04:01:20	Unconfirmed	DPB1*06:01:02	Unconfirmed
DPB1*02:01:02:22	Unconfirmed	DPB1*03:01:05	Unconfirmed	DPB1*04:01:21	Unconfirmed	DPB1*06:01:03	Unconfirmed
DPB1*02:01:02:23	Confirmed	DPB1*03:01:06	Unconfirmed	DPB1*04:01:22	Confirmed	DPB1*06:01:04	Unconfirmed
DPB1*02:01:02:24	Confirmed	DPB1*03:01:07	Unconfirmed	DPB1*04:01:23	Unconfirmed	DPB1*08:01	Unconfirmed
DPB1*02:01:02:25	Confirmed	DPB1*03:01:08	Unconfirmed	DPB1*04:01:24	Confirmed	DPB1*09:01:01	Confirmed
DPB1*02:01:02:26	Unconfirmed	DPB1*04:01:01:01	Confirmed	DPB1*04:01:25	Unconfirmed	DPB1*09:01:02	Confirmed
DPB1*02:01:02:27	Unconfirmed	DPB1*04:01:01:02	Unconfirmed	DPB1*04:01:26	Unconfirmed	DPB1*09:01:03	Unconfirmed
DPB1*02:01:02:28	Unconfirmed	DPB1*04:01:01:03	Confirmed	DPB1*04:01:27	Unconfirmed	DPB1*09:01:04	Confirmed
DPB1*02:01:02:29	Unconfirmed	DPB1*04:01:01:04	Confirmed	DPB1*04:01:28	Unconfirmed	DPB1*10:01:01:01	Confirmed
DPB1*02:01:02:30	Unconfirmed	DPB1*04:01:01:05	Confirmed	DPB1*04:01:29	Confirmed	DPB1*10:01:01:02	Unconfirmed
DPB1*02:01:02:31	Unconfirmed	DPB1*04:01:01:06	Unconfirmed	DPB1*04:01:30	Unconfirmed	DPB1*10:01:02	Unconfirmed
DPB1*02:01:02:32	Unconfirmed	DPB1*04:01:01:07	Unconfirmed	DPB1*04:01:31	Unconfirmed	DPB1*10:01:03	Unconfirmed
DPB1*02:01:02:33	Unconfirmed	DPB1*04:01:01:08	Unconfirmed	DPB1*04:01:32	Confirmed	DPB1*11:01:01	Confirmed
DPB1*02:01:03	Confirmed	DPB1*04:01:01:09	Unconfirmed	DPB1*04:01:33	Unconfirmed	DPB1*11:01:02	Unconfirmed
DPB1*02:01:04	Confirmed	DPB1*04:01:01:10	Unconfirmed	DPB1*04:02:01:01	Confirmed	DPB1*11:01:03	Confirmed
DPB1*02:01:05	Unconfirmed	DPB1*04:01:01:11	Unconfirmed	DPB1*04:02:01:02	Unconfirmed	DPB1*11:01:04	Unconfirmed
DPB1*02:01:06	Unconfirmed	DPB1*04:01:01:12	Unconfirmed	DPB1*04:02:01:03	Confirmed	DPB1*13:01:01	Confirmed
DPB1*02:01:07	Unconfirmed	DPB1*04:01:01:13	Unconfirmed	DPB1*04:02:01:04	Unconfirmed	DPB1*13:01:02	Confirmed
DPB1*02:01:08	Confirmed	DPB1*04:01:01:14	Unconfirmed	DPB1*04:02:01:05	Unconfirmed	DPB1*14:01:01:01	Confirmed
DPB1*02:01:09	Confirmed	DPB1*04:01:01:15	Unconfirmed	DPB1*04:02:01:06	Unconfirmed	DPB1*14:01:01:02	Unconfirmed

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Allele	Status¹	Allele	Status¹	Allele	Status¹	Allele	Status¹
DPB1*14:01:02	Unconfirmed	DPB1*49:01:01:02	Unconfirmed	DPB1*90:01:01	Confirmed	DPB1*132:01	Unconfirmed
DPB1*14:01:03	Unconfirmed	DPB1*49:01:01:03	Unconfirmed	DPB1*90:01:02	Confirmed	DPB1*133:01	Confirmed
DPB1*14:01:04	Unconfirmed	DPB1*50:01	Confirmed	DPB1*91:01:01:01	Confirmed	DPB1*134:01	Unconfirmed
DPB1*15:01:01	Confirmed	DPB1*51:01	Confirmed	DPB1*91:01:01:02	Unconfirmed	DPB1*135:01	Unconfirmed
DPB1*15:01:02	Unconfirmed	DPB1*52:01	Unconfirmed	DPB1*92:01	Unconfirmed	DPB1*136:01	Confirmed
DPB1*16:01:01	Confirmed	DPB1*53:01	Unconfirmed	DPB1*93:01	Confirmed	DPB1*137:01	Unconfirmed
DPB1*16:01:02	Unconfirmed	DPB1*54:01	Unconfirmed	DPB1*94:01	Unconfirmed	DPB1*138:01	Unconfirmed
DPB1*17:01:01:01	Confirmed	DPB1*55:01:01:01	Confirmed	DPB1*95:01	Unconfirmed	DPB1*139:01	Unconfirmed
DPB1*17:01:01:02	Unconfirmed	DPB1*55:01:01:02	Confirmed	DPB1*96:01	Unconfirmed	DPB1*140:01	Unconfirmed
DPB1*18:01	Confirmed	DPB1*56:01	Unconfirmed	DPB1*97:01	Unconfirmed	DPB1*141:01	Unconfirmed
DPB1*19:01	Confirmed	DPB1*57:01	Confirmed	DPB1*98:01	Confirmed	DPB1*142:01	Unconfirmed
DPB1*20:01:01	Confirmed	DPB1*58:01	Confirmed	DPB1*99:01	Unconfirmed	DPB1*143:01	Confirmed
DPB1*20:01:02	Unconfirmed	DPB1*59:01	Confirmed	DPB1*100:01	Unconfirmed	DPB1*144:01	Confirmed
DPB1*20:01:03	Unconfirmed	DPB1*60:01	Confirmed	DPB1*101:01	Unconfirmed	DPB1*145:01	Confirmed
DPB1*21:01	Confirmed	DPB1*61:01N	Confirmed	DPB1*102:01	Unconfirmed	DPB1*146:01	Confirmed
DPB1*22:01	Confirmed	DPB1*62:01	Confirmed	DPB1*103:01	Unconfirmed	DPB1*147:01	Unconfirmed
DPB1*23:01:01	Confirmed	DPB1*63:01	Confirmed	DPB1*104:01:01:01	Confirmed	DPB1*148:01	Unconfirmed
DPB1*23:01:02	Unconfirmed	DPB1*64:01N	Unconfirmed	DPB1*104:01:01:02	Confirmed	DPB1*149:01	Confirmed
DPB1*24:01	Confirmed	DPB1*65:01:01	Unconfirmed	DPB1*104:01:01:03	Confirmed	DPB1*150:01	Confirmed
DPB1*25:01	Confirmed	DPB1*65:01:02	Unconfirmed	DPB1*105:01:01:01	Confirmed	DPB1*151:01	Confirmed
DPB1*26:01:01	Unconfirmed	DPB1*66:01	Unconfirmed	DPB1*105:01:01:02	Confirmed	DPB1*152:01	Confirmed
DPB1*26:01:02	Confirmed	DPB1*67:01	Unconfirmed	DPB1*105:01:01:03	Confirmed	DPB1*153:01	Confirmed
DPB1*26:01:03	Unconfirmed	DPB1*68:01	Confirmed	DPB1*105:01:01:04	Unconfirmed	DPB1*154:01N	Confirmed
DPB1*27:01	Confirmed	DPB1*69:01	Confirmed	DPB1*106:01	Confirmed	DPB1*155:01:01	Confirmed
DPB1*28:01	Confirmed	DPB1*70:01	Unconfirmed	DPB1*107:01	Unconfirmed	DPB1*155:01:02	Confirmed
DPB1*29:01	Confirmed	DPB1*71:01:01	Confirmed	DPB1*108:01	Unconfirmed	DPB1*156:01	Confirmed
DPB1*30:01	Confirmed	DPB1*71:01:02	Unconfirmed	DPB1*109:01	Confirmed	DPB1*157:01	Confirmed
DPB1*31:01	Confirmed	DPB1*72:01:01:01	Confirmed	DPB1*110:01	Unconfirmed	DPB1*158:01	Confirmed
DPB1*32:01	Confirmed	DPB1*72:01:01:02	Confirmed	DPB1*111:01	Unconfirmed	DPB1*159:01N	Unconfirmed
DPB1*33:01:01:01	Confirmed	DPB1*72:01:01:03	Unconfirmed	DPB1*112:01	Unconfirmed	DPB1*160:01	Unconfirmed
DPB1*33:01:01:02	Confirmed	DPB1*73:01	Unconfirmed	DPB1*113:01	Unconfirmed	DPB1*161:01N	Confirmed
DPB1*34:01	Confirmed	DPB1*74:01	Unconfirmed	DPB1*114:01	Unconfirmed	DPB1*162:01:01	Unconfirmed
DPB1*35:01:01	Confirmed	DPB1*75:01	Unconfirmed	DPB1*115:01	Confirmed	DPB1*162:01:02	Unconfirmed
DPB1*36:01	Confirmed	DPB1*76:01	Confirmed	DPB1*116:01	Unconfirmed	DPB1*163:01	Unconfirmed
DPB1*37:01	Unconfirmed	DPB1*77:01	Confirmed	DPB1*117:01	Unconfirmed	DPB1*164:01	Unconfirmed
DPB1*38:01	Confirmed	DPB1*78:01	Confirmed	DPB1*118:01	Unconfirmed	DPB1*165:01	Confirmed
DPB1*39:01:01	Confirmed	DPB1*79:01	Unconfirmed	DPB1*119:01	Unconfirmed	DPB1*166:01	Confirmed
DPB1*39:01:02	Unconfirmed	DPB1*80:01	Confirmed	DPB1*120:01N	Unconfirmed	DPB1*167:01	Unconfirmed
DPB1*40:01	Confirmed	DPB1*81:01:01:01	Confirmed	DPB1*121:01	Unconfirmed	DPB1*168:01	Unconfirmed
DPB1*41:01:01	Confirmed	DPB1*81:01:01:02	Unconfirmed	DPB1*122:01	Unconfirmed	DPB1*169:01	Unconfirmed
DPB1*41:01:02	Unconfirmed	DPB1*82:01	Unconfirmed	DPB1*123:01	Unconfirmed	DPB1*170:01	Confirmed
DPB1*44:01	Confirmed	DPB1*83:01	Unconfirmed	DPB1*124:01:01:01	Confirmed	DPB1*171:01	Unconfirmed
DPB1*45:01	Confirmed	DPB1*84:01	Unconfirmed	DPB1*124:01:01:02	Unconfirmed	DPB1*172:01	Confirmed
DPB1*46:01:01	Confirmed	DPB1*85:01:01:01	Confirmed	DPB1*125:01	Unconfirmed	DPB1*173:01	Confirmed
DPB1*46:01:02	Unconfirmed	DPB1*85:01:01:02	Unconfirmed	DPB1*126:01	Confirmed	DPB1*174:01	Unconfirmed
DPB1*47:01:01:01	Confirmed	DPB1*85:01:02	Unconfirmed	DPB1*127:01	Confirmed	DPB1*175:01	Unconfirmed
DPB1*47:01:01:02	Unconfirmed	DPB1*86:01	Confirmed	DPB1*128:01	Confirmed	DPB1*176:01	Unconfirmed
DPB1*47:01:01:03	Unconfirmed	DPB1*87:01	Unconfirmed	DPB1*129:01	Unconfirmed	DPB1*177:01	Confirmed
DPB1*48:01	Confirmed	DPB1*88:01	Confirmed	DPB1*130:01	Confirmed	DPB1*178:01	Confirmed
DPB1*49:01:01:01	Confirmed	DPB1*89:01	Confirmed	DPB1*131:01	Confirmed	DPB1*179:01	Unconfirmed

101.311-24/04 – including *Taq* pol., IFU-01
101.311-24u/04u – without *Taq* pol., IFU-02

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“Instructions for Use” (IFU)

Lot No.: 7F7

Lot-specific information

Allele	Status ¹	Allele	Status ¹	Allele	Status ¹	Allele	Status ¹
DPB1*180:01	Confirmed	DPB1*230:01	Unconfirmed	DPB1*279:01:01	Unconfirmed	DPB1*328:01N	Unconfirmed
DPB1*181:01	Confirmed	DPB1*231:01	Unconfirmed	DPB1*279:01:02	Unconfirmed	DPB1*329:01	Confirmed
DPB1*182:01	Confirmed	DPB1*232:01	Unconfirmed	DPB1*280:01	Unconfirmed	DPB1*330:01	Unconfirmed
DPB1*183:01	Unconfirmed	DPB1*233:01	Confirmed	DPB1*281:01	Unconfirmed	DPB1*331:01	Unconfirmed
DPB1*184:01	Confirmed	DPB1*234:01	Unconfirmed	DPB1*282:01	Confirmed	DPB1*332:01	Unconfirmed
DPB1*185:01	Confirmed	DPB1*235:01	Unconfirmed	DPB1*283:01	Unconfirmed	DPB1*333:01	Confirmed
DPB1*186:01	Confirmed	DPB1*236:01:01	Confirmed	DPB1*284:01	Unconfirmed	DPB1*334:01	Confirmed
DPB1*187:01	Unconfirmed	DPB1*236:01:02	Confirmed	DPB1*285:01	Unconfirmed	DPB1*335:01	Unconfirmed
DPB1*188:01	Unconfirmed	DPB1*237:01	Unconfirmed	DPB1*286:01	Unconfirmed	DPB1*336:01	Unconfirmed
DPB1*189:01	Confirmed	DPB1*238:01	Unconfirmed	DPB1*287:01	Unconfirmed	DPB1*337:01	Unconfirmed
DPB1*190:01	Confirmed	DPB1*239:01	Unconfirmed	DPB1*288:01	Unconfirmed	DPB1*338:01	Confirmed
DPB1*191:01	Confirmed	DPB1*240:01	Unconfirmed	DPB1*289:01	Unconfirmed	DPB1*339:01	Unconfirmed
DPB1*192:01	Confirmed	DPB1*241:01	Unconfirmed	DPB1*290:01	Unconfirmed	DPB1*340:01	Confirmed
DPB1*193:01	Confirmed	DPB1*242:01	Unconfirmed	DPB1*291:01	Unconfirmed	DPB1*341:01	Unconfirmed
DPB1*194:01	Confirmed	DPB1*243:01	Unconfirmed	DPB1*292:01	Unconfirmed	DPB1*342:01	Unconfirmed
DPB1*195:01	Confirmed	DPB1*244:01	Unconfirmed	DPB1*293:01	Unconfirmed	DPB1*343:01	Unconfirmed
DPB1*196:01	Unconfirmed	DPB1*245:01	Confirmed	DPB1*294:01	Unconfirmed	DPB1*344:01	Unconfirmed
DPB1*197:01	Unconfirmed	DPB1*246:01	Unconfirmed	DPB1*295:01	Unconfirmed	DPB1*345:01	Unconfirmed
DPB1*198:01	Confirmed	DPB1*247:01	Unconfirmed	DPB1*296:01	Confirmed	DPB1*346:01	Unconfirmed
DPB1*199:01	Confirmed	DPB1*248:01	Unconfirmed	DPB1*297:01	Unconfirmed	DPB1*347:01	Unconfirmed
DPB1*200:01	Confirmed	DPB1*249:01	Unconfirmed	DPB1*298:01	Unconfirmed	DPB1*348:01:01	Unconfirmed
DPB1*201:01	Confirmed	DPB1*250:01	Unconfirmed	DPB1*299:01	Unconfirmed	DPB1*348:01:02	Unconfirmed
DPB1*202:01	Unconfirmed	DPB1*251:01	Unconfirmed	DPB1*300:01	Unconfirmed	DPB1*349:01	Confirmed
DPB1*203:01	Confirmed	DPB1*252:01	Unconfirmed	DPB1*301:01	Confirmed	DPB1*350:01	Confirmed
DPB1*204:01	Confirmed	DPB1*253:01	Confirmed	DPB1*302:01	Unconfirmed	DPB1*351:01	Unconfirmed
DPB1*205:01	Unconfirmed	DPB1*254:01	Unconfirmed	DPB1*303:01	Confirmed	DPB1*352:01	Unconfirmed
DPB1*206:01	Confirmed	DPB1*255:01	Unconfirmed	DPB1*304:01	Confirmed	DPB1*353:01	Unconfirmed
DPB1*207:01	Confirmed	DPB1*256:01	Unconfirmed	DPB1*305:01	Unconfirmed	DPB1*354:01:01	Unconfirmed
DPB1*208:01	Confirmed	DPB1*257:01	Confirmed	DPB1*306:01	Confirmed	DPB1*354:01:02	Confirmed
DPB1*209:01	Confirmed	DPB1*258:01	Unconfirmed	DPB1*307:01	Unconfirmed	DPB1*355:01	Confirmed
DPB1*210:01	Confirmed	DPB1*259:01	Unconfirmed	DPB1*308:01	Unconfirmed	DPB1*356:01	Unconfirmed
DPB1*211:01	Confirmed	DPB1*260:01	Confirmed	DPB1*309:01	Confirmed	DPB1*357:01N	Confirmed
DPB1*212:01	Confirmed	DPB1*261:01	Unconfirmed	DPB1*310:01	Unconfirmed	DPB1*358:01	Unconfirmed
DPB1*213:01	Unconfirmed	DPB1*262:01	Unconfirmed	DPB1*311:01	Confirmed	DPB1*359:01	Confirmed
DPB1*214:01	Confirmed	DPB1*263:01	Unconfirmed	DPB1*312:01	Confirmed	DPB1*360:01	Confirmed
DPB1*215:01	Confirmed	DPB1*264:01	Unconfirmed	DPB1*313:01	Confirmed	DPB1*361:01	Unconfirmed
DPB1*216:01N	Unconfirmed	DPB1*265:01	Confirmed	DPB1*314:01	Unconfirmed	DPB1*362:01	Unconfirmed
DPB1*217:01	Unconfirmed	DPB1*266:01	Unconfirmed	DPB1*315:01	Confirmed	DPB1*363:01	Unconfirmed
DPB1*218:01N	Confirmed	DPB1*267:01	Unconfirmed	DPB1*316:01	Confirmed	DPB1*364:01	Unconfirmed
DPB1*219:01	Unconfirmed	DPB1*268:01	Unconfirmed	DPB1*317:01	Unconfirmed	DPB1*365:01	Confirmed
DPB1*220:01	Confirmed	DPB1*269:01	Unconfirmed	DPB1*318:01	Confirmed	DPB1*366:01	Unconfirmed
DPB1*221:01	Confirmed	DPB1*270:01	Unconfirmed	DPB1*319:01	Confirmed	DPB1*367:01	Unconfirmed
DPB1*222:01	Confirmed	DPB1*271:01	Unconfirmed	DPB1*320:01	Unconfirmed	DPB1*368:01	Unconfirmed
DPB1*223:01	Unconfirmed	DPB1*272:01	Unconfirmed	DPB1*321:01	Confirmed	DPB1*369:01	Confirmed
DPB1*224:01	Confirmed	DPB1*273:01	Unconfirmed	DPB1*322:01	Unconfirmed	DPB1*370:01	Confirmed
DPB1*225:01	Confirmed	DPB1*274:01	Unconfirmed	DPB1*323:01	Unconfirmed	DPB1*371:01	Unconfirmed
DPB1*226:01	Unconfirmed	DPB1*275:01	Unconfirmed	DPB1*324:01	Unconfirmed	DPB1*372:01	Unconfirmed
DPB1*227:01	Unconfirmed	DPB1*276:01	Unconfirmed	DPB1*325:01	Unconfirmed	DPB1*373:01	Unconfirmed
DPB1*228:01	Unconfirmed	DPB1*277:01	Unconfirmed	DPB1*326:01	Unconfirmed	DPB1*374:01	Confirmed
DPB1*229:01	Unconfirmed	DPB1*278:01	Unconfirmed	DPB1*327:01	Confirmed	DPB1*375:01	Confirmed

101.311-24/04 – including *Taq* pol., IFU-01
101.311-24u/04u – without *Taq* pol., IFU-02

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Lot No.: 7F7

Lot-specific information

Allele	Status¹	Allele	Status¹	Allele	Status¹	Allele	Status¹
DPB1*376:01	Unconfirmed	DPB1*424:01	Confirmed	DPB1*472:01	Unconfirmed	DPB1*522:01	Confirmed
DPB1*377:01	Confirmed	DPB1*425:01	Unconfirmed	DPB1*473:01	Unconfirmed	DPB1*523:01	Confirmed
DPB1*378:01	Unconfirmed	DPB1*426:01	Unconfirmed	DPB1*474:01	Unconfirmed	DPB1*524:01	Unconfirmed
DPB1*379:01	Unconfirmed	DPB1*427:01	Unconfirmed	DPB1*475:01	Confirmed	DPB1*525:01	Unconfirmed
DPB1*380:01	Confirmed	DPB1*428:01	Unconfirmed	DPB1*476:01	Confirmed	DPB1*526:01	Confirmed
DPB1*381:01	Unconfirmed	DPB1*429:01	Unconfirmed	DPB1*477:01	Unconfirmed	DPB1*527:01	Unconfirmed
DPB1*382:01N	Confirmed	DPB1*430:01	Unconfirmed	DPB1*478:01	Unconfirmed	DPB1*528:01	Unconfirmed
DPB1*383:01	Confirmed	DPB1*431:01	Unconfirmed	DPB1*479:01	Unconfirmed	DPB1*529:01	Unconfirmed
DPB1*384:01	Confirmed	DPB1*432:01	Unconfirmed	DPB1*480:01	Unconfirmed	DPB1*530:01	Confirmed
DPB1*385:01	Confirmed	DPB1*433:01	Confirmed	DPB1*481:01	Unconfirmed	DPB1*531:01	Confirmed
DPB1*386:01	Unconfirmed	DPB1*434:01	Unconfirmed	DPB1*482:01	Confirmed	DPB1*532:01	Unconfirmed
DPB1*387:01	Unconfirmed	DPB1*435:01	Unconfirmed	DPB1*483:01	Unconfirmed	DPB1*533:01	Unconfirmed
DPB1*388:01	Unconfirmed	DPB1*436:01	Unconfirmed	DPB1*484:01	Confirmed	DPB1*534:01	Unconfirmed
DPB1*389:01	Unconfirmed	DPB1*437:01	Confirmed	DPB1*485:01	Confirmed	DPB1*535:01	Confirmed
DPB1*390:01	Confirmed	DPB1*438:01	Unconfirmed	DPB1*486:01	Confirmed	DPB1*536:01	Unconfirmed
DPB1*391:01	Confirmed	DPB1*439:01	Unconfirmed	DPB1*487:01	Unconfirmed	DPB1*537:01	Unconfirmed
DPB1*392:01	Confirmed	DPB1*440:01	Confirmed	DPB1*488:01	Confirmed	DPB1*538:01	Unconfirmed
DPB1*393:01	Confirmed	DPB1*441:01	Confirmed	DPB1*489:01	Confirmed	DPB1*539:01	Confirmed
DPB1*394:01	Confirmed	DPB1*442:01	Unconfirmed	DPB1*490:01	Confirmed	DPB1*540:01	Unconfirmed
DPB1*395:01	Unconfirmed	DPB1*443:01	Unconfirmed	DPB1*491:01	Unconfirmed	DPB1*541:01	Unconfirmed
DPB1*396:01	Confirmed	DPB1*444:01	Unconfirmed	DPB1*492:01	Unconfirmed	DPB1*542:01	Unconfirmed
DPB1*397:01	Unconfirmed	DPB1*445:01	Confirmed	DPB1*493:01	Confirmed	DPB1*543:01	Unconfirmed
DPB1*398:01	Confirmed	DPB1*446:01	Unconfirmed	DPB1*494:01	Unconfirmed	DPB1*544:01	Unconfirmed
DPB1*399:01	Unconfirmed	DPB1*447:01	Unconfirmed	DPB1*495:01	Confirmed	DPB1*545:01	Unconfirmed
DPB1*400:01	Unconfirmed	DPB1*448:01	Confirmed	DPB1*496:01	Unconfirmed	DPB1*546:01	Unconfirmed
DPB1*401:01N	Unconfirmed	DPB1*449:01	Unconfirmed	DPB1*497:01	Unconfirmed	DPB1*547:01	Unconfirmed
DPB1*402:01	Unconfirmed	DPB1*450:01N	Unconfirmed	DPB1*498:01	Unconfirmed	DPB1*548:01	Unconfirmed
DPB1*403:01N	Unconfirmed	DPB1*451:01	Unconfirmed	DPB1*499:01	Unconfirmed	DPB1*549:01	Unconfirmed
DPB1*404:01	Confirmed	DPB1*452:01	Confirmed	DPB1*500:01	Unconfirmed	DPB1*550:01	Unconfirmed
DPB1*405:01	Unconfirmed	DPB1*453:01	Unconfirmed	DPB1*501:01	Confirmed	DPB1*551:01N	Unconfirmed
DPB1*406:01	Unconfirmed	DPB1*454:01	Confirmed	DPB1*502:01	Unconfirmed	DPB1*552:01	Unconfirmed
DPB1*407:01	Unconfirmed	DPB1*455:01N	Unconfirmed	DPB1*503:01	Confirmed	DPB1*553:01	Unconfirmed
DPB1*408:01	Unconfirmed	DPB1*456:01	Unconfirmed	DPB1*504:01	Confirmed	DPB1*554:01	Unconfirmed
DPB1*409:01	Unconfirmed	DPB1*457:01	Unconfirmed	DPB1*505:01	Confirmed	DPB1*555:01	Unconfirmed
DPB1*410:01	Unconfirmed	DPB1*458:01	Confirmed	DPB1*506:01	Unconfirmed	DPB1*556:01	Unconfirmed
DPB1*411:01	Unconfirmed	DPB1*459:01	Unconfirmed	DPB1*507:01N	Confirmed	DPB1*557:01	Unconfirmed
DPB1*412:01	Confirmed	DPB1*460:01	Unconfirmed	DPB1*508:01	Confirmed	DPB1*558:01	Confirmed
DPB1*413:01	Confirmed	DPB1*461:01	Unconfirmed	DPB1*509:01	Unconfirmed	DPB1*559:01	Unconfirmed
DPB1*414:01	Confirmed	DPB1*462:01	Unconfirmed	DPB1*510:01	Unconfirmed	DPB1*560:01	Unconfirmed
DPB1*415:01	Unconfirmed	DPB1*463:01:01:01	Unconfirmed	DPB1*511:01	Confirmed	DPB1*561:01	Unconfirmed
DPB1*416:01:01:01	Confirmed	DPB1*463:01:01:02	Unconfirmed	DPB1*512:01	Confirmed	DPB1*562:01	Unconfirmed
DPB1*416:01:01:02	Confirmed	DPB1*463:01:01:03	Unconfirmed	DPB1*513:01	Unconfirmed	DPB1*563:01	Unconfirmed
DPB1*417:01	Unconfirmed	DPB1*464:01	Unconfirmed	DPB1*514:01	Confirmed	DPB1*564:01	Unconfirmed
DPB1*418:01	Confirmed	DPB1*465:01	Unconfirmed	DPB1*515:01	Unconfirmed	DPB1*565:01	Unconfirmed
DPB1*419:01	Unconfirmed	DPB1*466:01	Unconfirmed	DPB1*516:01	Unconfirmed	DPB1*566:01	Unconfirmed
DPB1*420:01	Unconfirmed	DPB1*467:01	Confirmed	DPB1*517:01	Unconfirmed	DPB1*567:01	Unconfirmed
DPB1*421:01	Unconfirmed	DPB1*468:01	Unconfirmed	DPB1*518:01	Unconfirmed	DPB1*568:01	Unconfirmed
DPB1*422:01	Confirmed	DPB1*469:01	Unconfirmed	DPB1*519:01	Confirmed	DPB1*569:01	Unconfirmed
DPB1*423:01:01	Confirmed	DPB1*470:01	Confirmed	DPB1*520:01	Confirmed	DPB1*570:01N	Confirmed
DPB1*423:01:02	Unconfirmed	DPB1*471:01	Unconfirmed	DPB1*521:01	Unconfirmed	DPB1*571:01	Unconfirmed

101.311-24/04 – including *Taq* pol., IFU-01
101.311-24u/04u – without *Taq* pol., IFU-02

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Lot No.: **7F7**

Lot-specific information

Allele	Status ¹	Allele	Status ¹	Allele	Status ¹	Allele	Status ¹
DPB1*572:01	Unconfirmed	DPB1*602:01	Unconfirmed	DPB1*632:01	Unconfirmed	DPB1*661:01N	Unconfirmed
DPB1*573:01	Confirmed	DPB1*603:01	Unconfirmed	DPB1*633:01	Unconfirmed	DPB1*662:01	Unconfirmed
DPB1*574:01	Unconfirmed	DPB1*604:01	Confirmed	DPB1*634:01	Unconfirmed	DPB1*663:01	Unconfirmed
DPB1*575:01	Unconfirmed	DPB1*605:01	Unconfirmed	DPB1*635:01	Unconfirmed	DPB1*664:01	Unconfirmed
DPB1*576:01	Confirmed	DPB1*606:01	Unconfirmed	DPB1*636:01	Unconfirmed		
DPB1*577:01	Confirmed	DPB1*607:01	Unconfirmed	DPB1*637:01	Unconfirmed		
DPB1*578:01	Unconfirmed	DPB1*608:01	Unconfirmed	DPB1*638:01	Unconfirmed		
DPB1*579:01	Unconfirmed	DPB1*609:01	Unconfirmed	DPB1*639:01	Unconfirmed		
DPB1*580:01	Unconfirmed	DPB1*610:01	Unconfirmed	DPB1*640:01	Unconfirmed		
DPB1*581:01	Unconfirmed	DPB1*611:01	Unconfirmed	DPB1*641:01	Unconfirmed		
DPB1*582:01	Unconfirmed	DPB1*612:01	Unconfirmed	DPB1*642:01	Unconfirmed		
DPB1*583:01	Unconfirmed	DPB1*613:01	Unconfirmed	DPB1*643:01	Unconfirmed		
DPB1*584:01	Unconfirmed	DPB1*614:01	Unconfirmed	DPB1*644:01	Unconfirmed		
DPB1*585:01	Unconfirmed	DPB1*615:01	Unconfirmed	DPB1*645:01	Unconfirmed		
DPB1*586:01	Unconfirmed	DPB1*616:01	Unconfirmed	DPB1*646:01	Unconfirmed		
DPB1*587:01	Unconfirmed	DPB1*617:01	Unconfirmed	DPB1*647:01	Unconfirmed		
DPB1*588:01	Unconfirmed	DPB1*618:01	Unconfirmed	DPB1*648:01:01:01	Unconfirmed		
DPB1*589:01	Unconfirmed	DPB1*619:01	Unconfirmed	DPB1*648:01:01:02	Unconfirmed		
DPB1*590:01	Unconfirmed	DPB1*620:01	Unconfirmed	DPB1*649:01	Unconfirmed		
DPB1*591:01	Unconfirmed	DPB1*621:01	Unconfirmed	DPB1*650:01	Unconfirmed		
DPB1*592:01	Unconfirmed	DPB1*622:01	Unconfirmed	DPB1*651:01	Unconfirmed		
DPB1*593:01	Unconfirmed	DPB1*623:01	Unconfirmed	DPB1*652:01	Confirmed		
DPB1*594:01	Unconfirmed	DPB1*624:01	Unconfirmed	DPB1*653:01	Unconfirmed		
DPB1*595:01	Unconfirmed	DPB1*625:01	Unconfirmed	DPB1*654:01	Unconfirmed		
DPB1*596:01	Unconfirmed	DPB1*626:01	Unconfirmed	DPB1*655:01	Unconfirmed		
DPB1*597:01	Unconfirmed	DPB1*627:01	Unconfirmed	DPB1*656:01	Unconfirmed		
DPB1*598:01N	Unconfirmed	DPB1*628:01	Unconfirmed	DPB1*657:01N	Unconfirmed		
DPB1*599:01	Confirmed	DPB1*629:01	Unconfirmed	DPB1*658:01	Confirmed		
DPB1*600:01	Unconfirmed	DPB1*630:01	Unconfirmed	DPB1*659:01	Unconfirmed		
DPB1*601:01	Unconfirmed	DPB1*631:01	Unconfirmed	DPB1*660:01	Unconfirmed		

¹Allele status “confirmed” or “unconfirmed” as listed on the IMGT/HLA web page 2017-August-10, release 3.29.0, www.ebi.ac.uk/imgt/hla.

101.311-24/04 – including *Taq* pol., IFU-01
 101.311-24u/04u – without *Taq* pol., IFU-02

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 “Instructions for Use” (IFU)

Lot No.: **7F7**

Lot-specific information
SPECIFICITY TABLE

DPB1 SSP typing

Specificities and sizes of the PCR products of the 95+1 primer mixes used for DPB1 SSP typing³

Primer Mix	Size of spec. PCR product ¹	Size of control band ²	Amplified DPB1 alleles ³
1	245 bp	515 bp	*01:01:01:01-01:01:04, 01:01:06, 03:01:01:01-03:01:08, 13:01:01-13:01:02, 25:01, 26:01:01-26:01:03, 29:01, 37:01, 44:01, 50:01, 52:01, 56:01, 61:01N, 78:01, 79:01, 88:01, 90:01:01-90:01:02, 92:01, 104:01:01:01-104:01:01:03, 107:01, 110:01, 111:01, 114:01, 118:01, 122:01, 124:01:01:01-124:01:01:02, 127:01, 132:01, 133:01, 142:01, 159:01N, 160:01, 162:01:01-162:01:02, 201:01, 203:01, 209:01, 220:01, 221:01, 222:01, 246:01, 248:01, 249:01, 267:01, 269:01, 270:01, 291:01, 293:01, 295:01, 315:01, 316:01, 326:01, 327:01, 329:01, 351:01, 362:01, 363:01, 389:01, 390:01, 393:01, 394:01, 403:01N, 404:01, 405:01, 411:01, 412:01, 417:01, 436:01, 439:01, 440:01, 448:01, 449:01, 462:01, 472:01, 481:01, 483:01, 506:01, 507:01N, 508:01, 509:01, 516:01, 518:01, 519:01, 536:01, 542:01, 543:01, 544:01, 545:01, 548:01, 562:01, 564:01, 565:01, 567:01, 568:01, 597:01, 599:01, 600:01, 609:01, 610:01, 612:01, 616:01, 631:01, 632:01, 634:01, 636:01, 645:01, 661:01N, 664:01
2	220 bp	515 bp	*01:01:01:01-01:01:06, 03:01:01:01-03:01:08, 18:01, 20:01:01-20:01:03, 25:01, 26:01:01-26:01:03, 27:01, 36:01, 50:01, 52:01, 56:01, 61:01N, 78:01, 79:01, 85:01:01:01-85:01:02, 87:01, 89:01, 90:01:01-90:01:02, 92:01, 104:01:01:01-104:01:01:03, 111:01, 114:01, 118:01, 122:01, 124:01:01:01-124:01:01:02, 127:01, 130:01, 132:01, 142:01, 158:01, 159:01N, 162:01:01-162:01:02, 164:01, 199:01, 201:01, 203:01, 209:01, 220:01, 221:01, 222:01, 248:01, 267:01, 270:01, 271:01, 291:01, 292:01, 293:01, 294:01, 315:01, 316:01, 326:01, 327:01, 329:01, 346:01, 351:01, 363:01, 369:01, 387:01, 390:01, 391:01, 392:01, 394:01, 403:01N, 404:01, 405:01, 411:01, 412:01, 417:01, 436:01, 439:01, 440:01, 462:01, 472:01, 481:01, 483:01, 506:01, 507:01N, 508:01, 509:01, 516:01, 532:01, 536:01, 542:01, 543:01, 545:01, 548:01, 562:01, 568:01, 599:01, 610:01, 613:01, 616:01, 623:01, 632:01, 635:01, 636:01, 645:01, 661:01N, 664:01
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48⁴	115 bp	430 bp	*56:01, 66:01, 76:01, 92:01, 110:01, 125:01, 156:01, 207:01, 288:01, 294:01, 470:01, 566:01
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52	130 bp	430 bp	*151:01
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57	255 bp	430 bp	*04:02:01:01-04:02:10, 05:01:03[?]-05:01:06[?], 06:01:02[?]-06:01:03[?], 08:01[?], 09:01:03[?]-09:01:04[?], 10:01:02[?]-10:01:03[?], 11:01:02[?]-11:01:03[?], 20:01:02[?]-20:01:03[?], 26:01:01[?], 26:01:03[?], 32:01[?], 37:01[?], 41:01:02[?], 44:01[?], 52:01[?], 53:01[?], 54:01[?], 56:01[?], 58:01[?], 59:01, 60:01[?], 61:01N[?], 62:01[?], 64:01N[?], 65:01:01[?]-65:01:02[?], 66:01[?], 67:01[?], 68:01[?], 70:01[?], 71:01:02[?], 73:01[?], 74:01[?], 75:01[?], 77:01, 79:01[?], 80:01, 82:01[?], 83:01[?], 84:01[?], 85:01:02[?], 86:01[?], 87:01[?], 89:01[?], 90:01:02[?], 92:01[?], 94:01[?], 95:01[?], 96:01[?], 97:01[?], 98:01[?], 99:01[?], 100:01[?], 101:01[?], 102:01[?], 103:01[?], 108:01[?], 110:01[?], 111:01[?], 112:01[?], 113:01[?], 114:01[?], 116:01[?], 117:01[?], 118:01[?], 119:01[?], 120:01N[?], 122:01[?], 125:01[?], 126:01, 129:01[?], 138:01, 139:01[?], 140:01[?], 142:01[?], 143:01[?], 144:01[?], 145:01[?], 146:01[?], 147:01[?], 148:01[?], 149:01[?], 150:01[?], 151:01[?], 153:01[?], 154:01N[?], 155:01:01[?]-155:01:02[?], 156:01[?], 157:01[?], 158:01[?], 159:01N[?], 160:01[?], 161:01N[?], 163:01[?], 164:01[?], 165:01[?], 166:01[?], 167:01[?], 169:01[?], 170:01[?], 171:01[?], 172:01[?], 173:01[?], 174:01[?], 175:01[?], 176:01[?], 177:01[?], 179:01[?], 180:01[?], 181:01[?], 182:01[?], 183:01[?], 184:01, 185:01[?], 186:01[?], 188:01[?], 189:01[?], 190:01, 192:01[?], 193:01[?], 194:01[?], 195:01[?], 196:01[?], 197:01[?], 198:01[?], 199:01[?], 200:01[?], 201:01[?], 202:01[?], 203:01[?], 204:01[?], 205:01[?], 206:01[?], 207:01[?], 209:01[?], 210:01[?], 211:01[?], 212:01[?], 213:01[?], 214:01[?], 215:01[?], 216:01N[?], 217:01[?], 218:01N[?], 219:01[?], 220:01[?], 221:01[?], 222:01[?], 223:01[?], 224:01[?], 226:01[?], 227:01[?], 228:01[?], 229:01[?], 230:01[?], 231:01[?], 232:01[?], 233:01[?], 234:01[?], 235:01[?], 236:01:02[?], 237:01[?], 238:01[?], 239:01[?], 240:01[?], 241:01[?], 242:01[?], 243:01[?], 245:01[?], 246:01[?], 247:01[?], 248:01[?], 249:01[?], 250:01[?], 251:01[?], 252:01[?], 253:01[?], 254:01[?], 255:01[?], 256:01[?], 257:01, 258:01[?], 259:01[?], 260:01, 261:01[?], 262:01[?], 263:01[?], 264:01[?], 265:01[?], 266:01[?], 267:01[?], 268:01[?], 269:01[?], 270:01[?], 271:01[?], 272:01[?], 273:01[?], 274:01[?], 275:01[?], 276:01[?], 277:01[?], 278:01[?], 279:01:01[?]-279:01:02[?], 280:01[?], 281:01[?], 282:01[?], 283:01[?], 284:01[?], 285:01[?], 286:01[?], 287:01[?], 288:01[?], 289:01[?], 290:01[?], 291:01[?], 292:01[?], 293:01[?], 294:01[?], 295:01[?], 297:01[?], 298:01[?], 299:01[?], 300:01[?], 301:01[?], 302:01[?], 303:01[?], 304:01[?], 305:01[?], 306:01[?], 307:01[?], 308:01[?], 309:01[?], 310:01[?], 311:01[?], 312:01[?], 313:01[?], 314:01[?], 315:01[?], 316:01[?], 317:01[?], 318:01[?], 319:01[?], 320:01[?], 321:01[?], 322:01[?], 323:01[?], 324:01[?], 325:01[?], 326:01[?], 327:01[?], 329:01[?], 330:01[?], 331:01[?], 332:01[?], 333:01[?], 334:01[?], 335:01[?], 336:01[?], 337:01[?], 338:01[?], 339:01[?], 340:01[?], 341:01[?], 342:01[?], 343:01[?], 344:01[?], 345:01[?], 346:01[?], 347:01[?], 348:01:01[?]-348:01:02[?], 349:01[?], 351:01, 354:01:01[?]-354:01:02[?], 355:01[?], 356:01[?], 357:01N[?], 358:01[?], 359:01[?], 360:01[?], 361:01[?], 362:01[?], 363:01[?], 364:01[?], 365:01[?], 366:01[?], 367:01[?], 368:01[?], 369:01[?], 370:01[?], 371:01[?], 372:01[?], 373:01[?], 374:01[?], 375:01[?], 376:01[?], 377:01[?], 378:01[?], 379:01[?], 380:01[?], 381:01[?], 382:01N[?], 383:01[?], 384:01[?], 385:01[?], 386:01[?], 387:01[?], 388:01[?], 389:01[?], 390:01[?], 391:01[?], 392:01[?], 393:01[?], 394:01[?], 395:01[?], 396:01[?], 397:01[?], 399:01[?], 400:01[?], 401:01N[?], 402:01[?], 403:01N[?], 404:01[?], 405:01[?], 406:01[?], 407:01[?], 408:01[?], 409:01[?], 410:01[?], 411:01[?], 412:01[?], 413:01[?], 416:01:01:01-416:01:01:02, 418:01[?], 419:01[?], 420:01[?], 421:01[?], 422:01[?], 423:01:01[?]-423:01:02[?], 424:01[?], 425:01[?], 426:01[?], 427:01[?], 428:01[?], 429:01[?], 430:01[?], 431:01[?], 432:01[?], 433:01[?], 434:01[?], 435:01[?], 436:01[?], 437:01[?], 438:01[?], 439:01[?], 441:01[?], 442:01[?], 443:01[?], 444:01[?], 445:01[?], 446:01[?], 447:01[?], 448:01[?], 449:01[?], 450:01N[?], 451:01[?], 452:01[?], 453:01[?], 454:01[?], 455:01N[?], 456:01[?], 457:01[?], 458:01[?], 460:01, 462:01, 465:01[?], 466:01[?], 467:01[?], 468:01[?], 469:01[?], 470:01[?], 471:01[?], 472:01[?], 473:01[?], 474:01[?], 475:01[?], 476:01[?], 477:01[?], 478:01[?], 479:01[?], 480:01[?], 481:01[?], 482:01[?], 483:01[?], 484:01[?], 485:01[?],
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101.311-24/04 – including *Taq* pol., IFU-01
101.311-24u/04u – without *Taq* pol., IFU-02

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Lot No.: 7F7

Lot-specific information

			486:01 [?] , 487:01 [?] , 488:01 [?] , 489:01 [?] , 490:01 [?] , 491:01 [?] , 492:01 [?] , 493:01 [?] , 494:01 [?] , 495:01 [?] , 496:01 [?] , 497:01 [?] , 499:01 [?] , 500:01 [?] , 501:01 [?] , 502:01 [?] , 503:01 [?] , 504:01 [?] , 505:01 [?] , 506:01 [?] , 507:01N [?] , 508:01 [?] , 509:01 [?] , 510:01 [?] , 511:01 [?] , 512:01 [?] , 513:01 [?] , 514:01 [?] , 515:01 [?] , 516:01 [?] , 517:01 [?] , 520:01 [?] , 521:01 [?] , 522:01 [?] , 523:01 [?] , 524:01 [?] , 525:01 [?] , 526:01 [?] , 527:01 [?] , 528:01 [?] , 529:01 [?] , 530:01 [?] , 531:01 [?] , 532:01 [?] , 537:01 [?] , 538:01 [?] , 539:01 [?] , 540:01 [?] , 541:01 [?] , 542:01 [?] , 543:01 [?] , 544:01 [?] , 545:01 [?] , 546:01 [?] , 548:01 [?] , 549:01 [?] , 550:01 [?] , 551:01N [?] , 552:01 [?] , 553:01 [?] , 554:01 [?] , 555:01 [?] , 556:01 [?] , 557:01 [?] , 559:01 [?] , 560:01 [?] , 561:01 [?] , 562:01 [?] , 563:01 [?] , 564:01 [?] , 565:01 [?] , 566:01 [?] , 567:01 [?] , 568:01 [?] , 569:01 [?] , 570:01N [?] , 573:01 [?] , 574:01 [?] , 575:01 [?] , 576:01 [?] , 577:01 [?] , 578:01 [?] , 579:01 [?] , 580:01 [?] , 581:01 [?] , 582:01 [?] , 583:01 [?] , 586:01 [?] , 587:01 [?] , 588:01 [?] , 589:01 [?] , 590:01 [?] , 591:01 [?] , 592:01 [?] , 593:01 [?] , 594:01 [?] , 595:01 [?] , 596:01 [?] , 597:01 [?] , 598:01N [?] , 599:01 [?] , 600:01 [?] , 601:01 [?] , 602:01 [?] , 603:01 [?] , 604:01 [?] , 605:01 [?] , 606:01 [?] , 607:01 [?] , 608:01 [?] , 609:01 [?] , 610:01 [?] , 611:01 [?] , 612:01 [?] , 614:01 [?] , 619:01 [?] , 620:01 [?] , 622:01 [?] , 623:01 [?] , 624:01 [?] , 625:01 [?] , 626:01 [?] , 627:01 [?] , 628:01 [?] , 629:01 [?] , 630:01 [?] , 631:01 [?] , 632:01 [?] , 633:01 [?] , 634:01 [?] , 635:01 [?] , 636:01 [?] , 637:01 [?] , 638:01 [?] , 639:01 [?] , 641:01 [?] , 642:01 [?] , 643:01 [?] , 644:01 [?] , 645:01 [?] , 646:01 [?] , 647:01, 655:01 [?] , 656:01 [?] , 657:01N [?] , 658:01 [?] , 659:01 [?] , 660:01 [?] , 661:01N [?] , 662:01 [?] , 663:01 [?] , 664:01 [?]
58⁴	95 bp	430 bp	*08:01 [?] , 09:01:03 [?] -09:01:04 [?] , 10:01:02 [?] -10:01:03 [?] , 11:01:02 [?] - 11:01:04 [?] , 14:01:02 [?] -14:01:04 [?] , 20:01:02 [?] -20:01:03 [?] , 23:01:02 [?] , 26:01:01 [?] , 26:01:03 [?] , 32:01 [?] , 37:01 [?] , 41:01:02 [?] , 44:01 [?] , 46:01:02 [?] , 52:01 [?] , 53:01 [?] , 54:01 [?] , 56:01 [?] , 58:01 [?] , 60:01 [?] , 61:01N [?] , 62:01 [?] , 64:01N [?] , 65:01:01 [?] -65:01:02 [?] , 66:01 [?] , 67:01 [?] , 68:01 [?] , 70:01 [?] , 71:01:02 [?] , 73:01 [?] , 74:01 [?] , 75:01 [?] , 79:01 [?] , 82:01 [?] , 83:01 [?] , 84:01 [?] , 85:01:02 [?] , 86:01 [?] , 87:01 [?] , 89:01 [?] , 90:01:02 [?] , 92:01 [?] , 94:01 [?] , 95:01 [?] , 96:01 [?] , 97:01 [?] , 98:01 [?] , 99:01 [?] , 100:01 [?] , 101:01 [?] , 102:01 [?] , 103:01 [?] , 107:01, 108:01 [?] , 110:01 [?] , 111:01 [?] , 112:01 [?] , 113:01 [?] , 114:01 [?] , 116:01 [?] , 117:01 [?] , 118:01 [?] , 119:01 [?] , 120:01N [?] , 121:01 [?] , 122:01 [?] , 123:01 [?] , 125:01 [?] , 129:01 [?] , 132:01 [?] , 133:01 [?] , 134:01 [?] , 135:01 [?] , 136:01 [?] , 137:01 [?] , 139:01 [?] , 140:01 [?] , 142:01 [?] , 143:01 [?] , 144:01 [?] , 145:01 [?] , 146:01 [?] , 147:01 [?] , 148:01 [?] , 149:01 [?] , 150:01 [?] , 151:01 [?] , 152:01 [?] , 153:01 [?] , 154:01N [?] , 155:01:01 [?] -155:01:02 [?] , 156:01 [?] , 157:01 [?] , 158:01 [?] , 159:01N [?] , 160:01 [?] , 161:01N [?] , 162:01:01 [?] , 163:01 [?] , 164:01 [?] , 165:01 [?] , 166:01 [?] , 167:01 [?] , 168:01 [?] , 169:01 [?] , 170:01 [?] , 171:01 [?] , 172:01 [?] , 173:01 [?] , 174:01 [?] , 175:01 [?] , 176:01 [?] , 177:01 [?] , 179:01 [?] , 180:01 [?] , 181:01 [?] , 182:01 [?] , 183:01 [?] , 185:01 [?] , 186:01 [?] , 188:01 [?] , 189:01 [?] , 192:01 [?] , 193:01 [?] , 194:01 [?] , 195:01 [?] , 196:01 [?] , 197:01 [?] , 198:01 [?] , 199:01 [?] , 200:01 [?] , 201:01 [?] , 202:01 [?] , 203:01 [?] , 204:01 [?] , 205:01 [?] , 206:01 [?] , 207:01 [?] , 209:01 [?] , 210:01 [?] , 211:01 [?] , 212:01 [?] , 213:01 [?] , 214:01 [?] , 215:01 [?] , 216:01N [?] , 217:01 [?] , 218:01N [?] , 219:01 [?] , 220:01 [?] , 221:01 [?] , 222:01 [?] , 223:01 [?] , 224:01 [?] , 225:01 [?] , 226:01 [?] , 227:01 [?] , 228:01 [?] , 229:01 [?] , 230:01 [?] , 231:01 [?] , 232:01 [?] , 233:01 [?] , 234:01 [?] , 235:01 [?] , 236:01:02 [?] , 237:01 [?] , 238:01 [?] , 239:01 [?] , 240:01 [?] , 241:01 [?] , 242:01 [?] , 243:01 [?] , 245:01 [?] , 246:01 [?] , 247:01 [?] , 248:01 [?] , 249:01 [?] , 250:01 [?] , 251:01 [?] , 252:01 [?] , 253:01 [?] , 254:01 [?] , 255:01 [?] , 256:01 [?] , 257:01 [?] , 258:01 [?] , 259:01 [?] , 261:01 [?] , 262:01 [?] , 263:01 [?] , 264:01 [?] , 265:01 [?] , 266:01 [?] , 267:01 [?] , 268:01 [?] , 269:01 [?] , 270:01 [?] , 271:01 [?] , 272:01 [?] , 273:01 [?] , 274:01 [?] , 275:01 [?] , 276:01 [?] , 277:01 [?] , 278:01 [?] , 279:01:01 [?] -279:01:02 [?] , 280:01 [?] , 281:01 [?] , 282:01 [?] , 283:01 [?] , 284:01 [?] , 285:01 [?] , 286:01 [?] , 287:01 [?] , 288:01 [?] , 289:01 [?] , 290:01 [?] , 291:01 [?] , 292:01 [?] , 293:01 [?] , 294:01 [?] , 295:01 [?] , 296:01, 297:01 [?] , 298:01 [?] , 299:01 [?] , 300:01 [?] , 301:01 [?] , 302:01 [?] , 303:01 [?] , 304:01 [?] , 305:01 [?] , 306:01 [?] , 307:01 [?] , 308:01 [?] , 309:01 [?] , 310:01 [?] , 311:01 [?] , 312:01 [?] , 313:01 [?] ,

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59⁴	80 bp	430 bp	*05:01:01:01-05:01:07, 08:01 [?] , 09:01:03 [?] -09:01:04 [?] , 10:01:02 [?] - 10:01:03 [?] , 11:01:02 [?] -11:01:04 [?] , 14:01:02 [?] -14:01:03 [?] , 15:01:02 [?] , 19:01: 20:01:02 [?] -20:01:03 [?] , 22:01, 26:01:01 [?] , 26:01:03 [?] , 29:01, 32:01 [?] , 34:01, 37:01 [?] , 38:01, 41:01:02 [?] , 44:01 [?] , 46:01:02 [?] , 52:01 [?] , 53:01 [?] , 54:01 [?] , 56:01 [?] , 58:01 [?] , 60:01 [?] , 61:01N [?] , 62:01 [?] , 63:01, 64:01N [?] , 65:01:01 [?] -65:01:02 [?] , 66:01 [?] , 67:01 [?] , 68:01 [?] , 70:01 [?] , 71:01:02 [?] , 73:01 [?] , 74:01 [?] , 75:01 [?] , 78:01, 79:01 [?] , 82:01 [?] , 83:01 [?] , 84:01 [?] , 85:01:02 [?] , 86:01 [?] , 87:01 [?] , 89:01 [?] , 90:01:02 [?] , 92:01 [?] , 94:01 [?] , 95:01 [?] , 96:01 [?] , 97:01 [?] , 98:01 [?] , 99:01 [?] , 100:01 [?] , 101:01 [?] , 102:01 [?] , 103:01 [?] ,

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			502:01 [?] , 503:01 [?] , 504:01 [?] , 505:01 [?] , 506:01 [?] , 507:01N [?] , 508:01 [?] , 509:01 [?] , 510:01 [?] , 511:01 [?] , 512:01 [?] , 513:01 [?] , 514:01 [?] , 515:01 [?] , 516:01 [?] , 517:01 [?] , 518:01, 519:01, 520:01 [?] , 521:01 [?] , 522:01 [?] , 523:01 [?] , 524:01 [?] , 525:01 [?] , 526:01 [?] , 527:01 [?] , 528:01 [?] , 529:01 [?] , 530:01 [?] , 531:01 [?] , 532:01 [?] , 533:01, 536:01, 537:01 [?] , 538:01 [?] , 539:01 [?] , 540:01 [?] , 541:01 [?] , 542:01 [?] , 543:01 [?] , 544:01 [?] , 545:01 [?] , 546:01 [?] , 547:01, 548:01 [?] , 549:01 [?] , 550:01 [?] , 551:01N [?] , 552:01 [?] , 553:01 [?] , 554:01 [?] , 555:01 [?] , 556:01 [?] , 557:01 [?] , 559:01 [?] , 560:01 [?] , 561:01 [?] , 562:01 [?] , 563:01 [?] , 564:01 [?] , 565:01 [?] , 566:01 [?] , 567:01 [?] , 568:01 [?] , 569:01 [?] , 570:01N [?] , 572:01, 573:01 [?] , 574:01 [?] , 575:01 [?] , 576:01 [?] , 577:01 [?] , 578:01 [?] , 579:01 [?] , 580:01 [?] , 581:01 [?] , 582:01 [?] , 583:01 [?] , 584:01, 585:01 ^w , 586:01 [?] , 587:01 [?] , 588:01 [?] , 589:01 [?] , 590:01 [?] , 591:01 [?] , 592:01 [?] , 593:01 [?] , 594:01 [?] , 595:01 [?] , 596:01 [?] , 597:01 [?] , 598:01N [?] , 599:01 [?] , 600:01 [?] , 601:01 [?] , 602:01 [?] , 603:01 [?] , 604:01 [?] , 605:01 [?] , 606:01 [?] , 607:01 [?] , 608:01 [?] , 609:01 [?] , 610:01 [?] , 611:01 [?] , 612:01 [?] , 613:01, 614:01 [?] , 616:01, 619:01 [?] , 620:01 [?] , 621:01, 622:01 [?] , 623:01 [?] , 624:01 [?] , 625:01 [?] , 626:01 [?] , 627:01 [?] , 628:01 [?] , 629:01 [?] , 630:01 [?] , 631:01 [?] , 632:01 [?] , 633:01 [?] , 634:01 [?] , 635:01 [?] , 636:01 [?] , 637:01 [?] , 638:01 [?] , 639:01 [?] , 641:01 [?] , 642:01 [?] , 643:01 [?] , 644:01 [?] , 645:01 [?] , 646:01 [?] , 648:01:01:01- 648:01:01:02, 649:01, 650:01, 652:01, 653:01, 654:01, 655:01 [?] , 656:01 [?] , 657:01N [?] , 658:01 [?] , 659:01 [?] , 660:01 [?] , 661:01N [?] , 662:01 [?] , 663:01 [?] , 664:01 [?]
63	210 bp 245 bp 275 bp	515 bp	*183:01, 319:01 *216:01N *57:01 [?] , 280:01, 356:01, 539:01
64	145 bp 180 bp 215 bp	430 bp	*217:01, 256:01, 658:01 *232:01, 475:01 *226:01
65	170 bp 205 bp 240 bp	430 bp	*181:01, 257:01, 258:01, 475:01 *604:01 *238:01
66	185 bp 235 bp 280 bp	515 bp	*276:01, 418:01, 432:01 *239:01, 260:01, 487:01 *57:01 [?] , 356:01, 455:01N, 539:01
67⁴	90 bp 155 bp 180 bp	430 bp	*504:01 *501:01 *261:01, 380:01, 657:01N
68⁷	175 bp 200 bp 265 bp	430 bp	*228:01, 334:01, 522:01, 594:01 *191:01, 192:01, 310:01, 342:01 *109:01, 117:01, 158:01, 164:01, 199:01, 200:01, 271:01, 294:01, 369:01, 392:01, 440:01, 480:01, 508:01, 531:01, 561:01, 601:01, 663:01
69	180 bp 215 bp 245 bp	515 bp	*227:01, 228:01 *520:01 *210:01, 211:01, 240:01, 272:01
70⁴	75 bp 115 bp 155 bp 180 bp 205 bp 260 bp	430 bp	*476:01 *551:01N *253:01, 286:01, 660:01 *334:01, 522:01, 594:01 *262:01, 263:01 *196:01, 596:01
71	140 bp 180 bp 260 bp	430 bp	*208:01, 250:01 *315:01 *268:01
72	145 bp 175 bp 255 bp	430 bp	*327:01 *270:01 *267:01, 293:01, 393:01

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73	170 bp 190 bp	430 bp	*231:01 *18:01, 28:01, 139:01, 178:01, 230:01, 279:01:01, 280:01, 292:01, 296:01, 347:01, 431:01, 489:01, 499:01, 512:01, 526:01, 644:01
74⁴	115 bp 160 bp 215 bp	430 bp	*181:01, 406:01 *255:01, 274:01, 374:01 *252:01, 273:01, 582:01, 624:01
75	140 bp	430 bp	*03:01:01:01-03:01:08, 04:02:01:01-04:02:01:09, 04:02:02 ^w , 04:02:03- 04:02:10, 05:01:01:01-05:01:07, 14:01:01:01-14:01:01:02, 14:01:03- 14:01:04, 18:01, 20:01:01-20:01:03, 23:01:01-23:01:02, 25:01, 34:01 ^w , 35:01:01, 36:01, 38:01, 45:01, 50:01, 52:01, 57:01, 59:01, 60:01, 61:01N, 62:01, 63:01, 67:01, 68:01, 70:01, 73:01, 75:01, 77:01, 78:01, 79:01, 80:01, 82:01, 83:01, 84:01, 87:01, 91:01:01:01-91:01:01:02, 97:01, 98:01, 100:01, 104:01:01:01-104:01:01:03, 105:01:01:01- 105:01:01:04, 108:01, 111:01, 112:01, 114:01, 116:01, 119:01, 124:01:01:01-124:01:01:02, 129:01, 130:01, 132:01, 135:01, 138:01, 140:01, 143:01, 144:01, 153:01, 164:01, 170:01 ^w , 171:01, 183:01, 184:01, 185:01, 190:01, 197:01, 201:01, 209:01, 210:01, 219:01, 221:01, 222:01, 223:01, 226:01, 233:01, 242:01, 243:01, 244:01, 248:01, 252:01, 256:01, 257:01, 259:01, 260:01, 263:01, 270:01, 271:01, 274:01 ^w , 284:01, 285:01, 286:01, 292:01, 293:01, 300:01, 301:01, 307:01, 308:01, 312:01, 316:01, 317:01, 321:01, 329:01, 330:01, 331:01, 333:01, 338:01, 342:01, 351:01, 364:01, 365:01, 368:01, 369:01, 373:01, 374:01 ^w , 379:01, 380:01, 383:01, 390:01, 391:01, 392:01, 394:01, 395:01, 402:01, 404:01, 405:01, 409:01, 420:01, 424:01, 429:01, 431:01, 435:01, 439:01, 443:01 ^w , 445:01, 446:01, 451:01, 463:01:01:01-463:01:01:03, 466:01, 472:01, 473:01, 477:01, 484:01 ^w , 488:01, 491:01 ^w , 492:01, 494:01, 495:01, 498:01, 507:01N, 508:01, 509:01, 525:01, 532:01, 539:01, 540:01, 545:01, 548:01, 549:01 ^w , 560:01, 568:01, 571:01, 572:01, 573:01, 577:01, 580:01 ^w , 586:01, 587:01, 589:01, 594:01, 595:01, 596:01, 598:01N, 599:01, 605:01, 606:01, 610:01, 611:01, 613:01, 619:01, 620:01, 621:01, 624:01, 627:01, 629:01, 635:01, 638:01, 645:01, 646:01, 647:01, 648:01:01:01-648:01:01:02, 651:01, 657:01N, 664:01
76⁴	120 bp 180 bp 220 bp 250 bp	430 bp	*215:01 *283:01, 359:01, 423:01:01-423:01:02, 523:01, 577:01 *193:01 *225:01
77⁴	120 bp 170 bp 220 bp 260 bp	430 bp	*215:01 *488:01, 557:01 *194:01, 360:01 *311:01, 368:01
78	145 bp 180 bp 220 bp 255 bp	430 bp	*282:01 *318:01, 485:01, 523:01, 641:01 *195:01, 224:01, 510:01 *224:01
79⁴	75 bp 115 bp 170 bp 245 bp	515 bp	*476:01 *551:01N *275:01, 283:01, 359:01, 396:01, 577:01 *212:01, 224:01
80⁶	160 bp 250 bp	430 bp	*213:01, 282:01, 286:01, 396:01, 433:01, 488:01, 557:01, 660:01 *225:01
81⁴	65 bp 95 bp 145 bp	430 bp	*591:01 *276:01 *250:01

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	180 bp		*202:01, 230:01, 313:01
	205 bp		*281:01, 472:01
	260 bp		*268:01
	285 bp		*472:01
82⁴	80 bp	430 bp	*01:01:01:01-01:01:06, 02:01:02:01-02:02:01:07, 03:01:01:01-03:01:08, 04:01:01:01-04:02:10, 06:01:01:01-06:01:01:03, 06:01:02 ² -06:01:03 ² , 06:01:04, 08:01 ² , 09:01:01-09:01:02, 09:01:03 ² -09:01:04 ² , 10:01:01:01-10:01:01:02, 10:01:02 ² -10:01:03 ² , 11:01:01, 11:01:02 ² -11:01:04 ² , 13:01:01-13:01:02, 14:01:01:01-14:01:01:02, 14:01:02 ² -14:01:03 ² , 14:01:04, 15:01:01, 15:01:02 ² , 16:01:01, 16:01:02 ² , 17:01:01:01-17:01:01:02, 18:01, 20:01:01, 20:01:02 ² -20:01:03 ² , 21:01, 23:01:01, 23:01:02 ² , 24:01, 25:01, 26:01:01 ² , 26:01:02, 26:01:03 ² , 27:01, 28:01, 30:01, 31:01, 32:01 ² , 33:01:01:01-33:01:01:02, 35:01:01, 36:01, 37:01 ² , 39:01:01-39:01:02, 40:01, 41:01:01, 41:01:02 ² , 44:01 ² , 45:01, 46:01:01, 46:01:02 ² , 47:01:01:01-47:01:01:03, 48:01, 49:01:01:01-49:01:01:03, 50:01, 51:01, 52:01 ² , 53:01 ² , 54:01 ² , 55:01:01:01-55:01:01:02, 56:01 ² , 57:01, 58:01 ² , 59:01, 60:01 ² , 61:01N ² , 62:01 ² , 64:01N ² , 65:01:01 ² -65:01:02 ² , 66:01 ² , 67:01 ² , 68:01 ² , 69:01, 70:01 ² , 71:01:01, 71:01:02 ² , 72:01:01:01-72:01:01:03, 73:01 ² , 74:01 ² , 75:01 ² , 76:01, 77:01, 79:01 ² , 80:01, 81:01:01:01-81:01:01:02, 82:01 ² , 83:01 ² , 84:01 ² , 85:01:01:01-85:01:01:02, 85:01:02 ² , 86:01 ² , 87:01 ² , 88:01, 89:01 ² , 90:01:01, 90:01:02 ² , 91:01:01:01-91:01:01:02, 92:01 ² , 93:01, 94:01 ² , 95:01 ² , 96:01 ² , 97:01 ² , 98:01 ² , 99:01 ² , 100:01 ² , 101:01 ² , 102:01 ² , 103:01 ² , 105:01:01:01-105:01:01:04, 106:01, 107:01, 108:01 ² , 109:01, 110:01 ² , 111:01 ² , 112:01 ² , 113:01 ² , 114:01 ² , 115:01, 116:01 ² , 117:01 ² , 118:01 ² , 119:01 ² , 120:01N ² , 121:01 ² , 122:01 ² , 123:01 ² , 124:01:01:01-124:01:01:02, 125:01 ² , 126:01, 127:01, 128:01, 129:01 ² , 130:01, 131:01, 132:01 ² , 133:01 ² , 134:01 ² , 135:01, 136:01, 137:01 ² , 138:01, 139:01 ² , 140:01 ² , 141:01, 142:01 ² , 143:01 ² , 144:01 ² , 145:01 ² , 146:01 ² , 147:01 ² , 148:01 ² , 149:01 ² , 150:01 ² , 151:01 ² , 152:01 ² , 153:01 ² , 154:01N ² , 155:01:01 ² -155:01:02 ² , 156:01 ² , 157:01 ² , 158:01 ² , 159:01N ² , 160:01 ² , 161:01N ² , 162:01:01-162:01:02, 163:01 ² , 164:01 ² , 165:01 ² , 166:01 ² , 167:01 ² , 168:01 ² , 169:01 ² , 170:01 ² , 171:01 ² , 172:01 ² , 173:01 ² , 174:01 ² , 175:01 ² , 176:01 ² , 177:01 ² , 178:01, 179:01 ² , 180:01 ² , 181:01 ² , 182:01 ² , 183:01 ² , 184:01, 185:01 ² , 186:01 ² , 187:01, 188:01 ² , 189:01 ² , 190:01, 191:01, 192:01 ² , 193:01 ² , 194:01 ² , 195:01 ² , 196:01 ² , 197:01 ² , 198:01 ² , 199:01 ² , 200:01 ² , 201:01 ² , 202:01 ² , 203:01 ² , 204:01 ² , 205:01 ² , 206:01 ² , 207:01 ² , 208:01, 209:01 ² , 210:01 ² , 211:01 ² , 212:01 ² , 213:01 ² , 214:01 ² , 215:01 ² , 216:01N ² , 217:01 ² , 218:01N ² , 219:01 ² , 220:01 ² , 221:01 ² , 222:01 ² , 223:01 ² , 224:01 ² , 225:01 ² , 226:01 ² , 227:01 ² , 228:01 ² , 229:01 ² , 230:01 ² , 231:01 ² , 232:01 ² , 233:01 ² , 234:01 ² , 235:01 ² , 236:01:01, 236:01:02 ² , 237:01 ² , 238:01 ² , 239:01 ² , 240:01 ² , 241:01 ² , 242:01 ² , 243:01 ² , 244:01, 245:01 ² , 246:01 ² , 247:01 ² , 248:01 ² , 249:01 ² , 250:01 ² , 251:01 ² , 252:01 ² , 253:01 ² , 254:01 ² , 255:01 ² , 256:01 ² , 257:01, 258:01 ² , 259:01 ² , 260:01, 261:01 ² , 262:01 ² , 263:01 ² , 264:01 ² , 265:01 ² , 266:01 ² , 267:01 ² , 268:01 ² , 269:01 ² , 270:01 ² , 271:01 ² , 272:01 ² , 273:01 ² , 274:01 ² , 275:01 ² , 276:01 ² , 277:01 ² , 278:01 ² , 279:01:01 ² -279:01:02 ² , 280:01 ² , 281:01 ² , 282:01 ² , 283:01 ² , 284:01 ² , 285:01 ² , 286:01 ² , 287:01 ² , 288:01 ² , 289:01 ² , 290:01 ² , 291:01 ² , 292:01 ² , 293:01 ² , 294:01 ² , 295:01 ² , 296:01, 297:01 ² , 298:01 ² , 299:01 ² , 300:01 ² , 301:01 ² , 302:01 ² , 303:01 ² , 304:01 ² , 305:01 ² , 306:01 ² , 307:01 ² , 308:01 ² , 309:01 ² , 310:01 ² , 311:01 ² , 312:01 ² , 313:01 ² , 314:01 ² , 315:01 ² , 316:01 ² , 317:01 ² , 318:01 ² , 319:01 ² , 320:01 ² , 321:01 ² , 322:01 ² , 323:01 ² , 324:01 ² , 325:01 ² , 326:01 ² , 327:01 ² , 328:01N, 329:01 ² , 330:01 ² , 331:01 ² , 332:01 ² , 333:01 ² , 334:01 ² , 335:01 ² , 336:01 ² , 337:01 ² ,

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			338:01 [?] , 339:01 [?] , 340:01 [?] , 341:01 [?] , 342:01 [?] , 343:01 [?] , 344:01 [?] , 345:01 [?] , 346:01 [?] , 347:01 [?] , 348:01:01 [?] -348:01:02 [?] , 349:01 [?] , 350:01, 351:01, 352:01, 353:01, 354:01:01 [?] -354:01:02 [?] , 355:01 [?] , 356:01 [?] , 357:01N [?] , 358:01 [?] , 359:01 [?] , 360:01 [?] , 361:01 [?] , 362:01 [?] , 363:01 [?] , 364:01 [?] , 365:01 [?] , 366:01 [?] , 367:01 [?] , 368:01 [?] , 369:01 [?] , 370:01 [?] , 371:01 [?] , 372:01 [?] , 373:01 [?] , 374:01 [?] , 375:01 [?] , 376:01 [?] , 377:01 [?] , 378:01 [?] , 379:01 [?] , 380:01 [?] , 381:01 [?] , 382:01N [?] , 383:01 [?] , 384:01 [?] , 385:01 [?] , 386:01 [?] , 387:01 [?] , 388:01 [?] , 389:01 [?] , 390:01 [?] , 391:01 [?] , 392:01 [?] , 393:01 [?] , 394:01 [?] , 395:01 [?] , 396:01 [?] , 397:01 [?] , 398:01, 399:01 [?] , 400:01 [?] , 401:01N [?] , 402:01 [?] , 403:01N [?] , 404:01 [?] , 405:01 [?] , 406:01 [?] , 407:01 [?] , 408:01 [?] , 409:01 [?] , 410:01 [?] , 411:01 [?] , 412:01 [?] , 413:01 [?] , 415:01, 416:01:01:01-416:01:01:02, 417:01, 418:01 [?] , 419:01 [?] , 420:01 [?] , 421:01 [?] , 422:01 [?] , 423:01:01 [?] -423:01:02 [?] , 424:01 [?] , 425:01 [?] , 426:01 [?] , 427:01 [?] , 428:01 [?] , 429:01 [?] , 430:01 [?] , 431:01 [?] , 432:01 [?] , 433:01 [?] , 434:01 [?] , 435:01 [?] , 436:01 [?] , 437:01 [?] , 438:01 [?] , 439:01 [?] , 440:01, 441:01 [?] , 442:01 [?] , 443:01 [?] , 444:01 [?] , 445:01 [?] , 446:01 [?] , 447:01 [?] , 448:01 [?] , 449:01 [?] , 450:01N [?] , 451:01 [?] , 452:01 [?] , 453:01 [?] , 454:01 [?] , 455:01N [?] , 456:01 [?] , 457:01 [?] , 458:01 [?] , 459:01, 460:01, 461:01, 462:01, 463:01:01:01-463:01:01:03, 464:01, 465:01 [?] , 466:01 [?] , 467:01 [?] , 468:01 [?] , 469:01 [?] , 470:01 [?] , 471:01 [?] , 472:01 [?] , 473:01 [?] , 474:01 [?] , 475:01 [?] , 476:01 [?] , 477:01 [?] , 478:01 [?] , 479:01 [?] , 480:01 [?] , 481:01 [?] , 482:01 [?] , 483:01 [?] , 484:01 [?] , 485:01 [?] , 486:01 [?] , 487:01 [?] , 488:01 [?] , 489:01 [?] , 490:01 [?] , 491:01 [?] , 492:01 [?] , 493:01 [?] , 494:01 [?] , 495:01 [?] , 496:01 [?] , 497:01 [?] , 498:01, 499:01 [?] , 500:01 [?] , 501:01 [?] , 502:01 [?] , 503:01 [?] , 504:01 [?] , 505:01 [?] , 506:01 [?] , 507:01N [?] , 508:01 [?] , 509:01 [?] , 510:01 [?] , 511:01 [?] , 512:01 [?] , 513:01 [?] , 514:01 [?] , 515:01 [?] , 516:01 [?] , 517:01 [?] , 518:01, 520:01 [?] , 521:01 [?] , 522:01 [?] , 523:01 [?] , 524:01 [?] , 525:01 [?] , 526:01 [?] , 527:01 [?] , 528:01 [?] , 529:01 [?] , 530:01 [?] , 531:01 [?] , 532:01 [?] , 533:01 [?] , 534:01 [?] , 535:01, 536:01 [?] , 537:01 [?] , 538:01 [?] , 539:01 [?] , 540:01 [?] , 541:01 [?] , 542:01 [?] , 543:01 [?] , 544:01 [?] , 545:01 [?] , 546:01 [?] , 548:01 [?] , 549:01 [?] , 550:01 [?] , 551:01N [?] , 552:01 [?] , 553:01 [?] , 554:01 [?] , 555:01 [?] , 556:01 [?] , 557:01 [?] , 558:01, 559:01 [?] , 560:01 [?] , 561:01 [?] , 562:01 [?] , 563:01 [?] , 564:01 [?] , 565:01 [?] , 566:01 [?] , 567:01 [?] , 568:01 [?] , 569:01 [?] , 570:01N [?] , 571:01, 572:01, 573:01 [?] , 574:01 [?] , 575:01 [?] , 576:01 [?] , 577:01 [?] , 578:01 [?] , 579:01 [?] , 580:01 [?] , 581:01 [?] , 582:01 [?] , 583:01 [?] , 584:01, 585:01, 586:01 [?] , 587:01 [?] , 588:01 [?] , 589:01 [?] , 590:01 [?] , 591:01 [?] , 592:01 [?] , 593:01 [?] , 594:01 [?] , 595:01 [?] , 596:01 [?] , 597:01 [?] , 598:01N [?] , 599:01 [?] , 600:01 [?] , 601:01 [?] , 602:01 [?] , 603:01 [?] , 604:01 [?] , 605:01 [?] , 606:01 [?] , 607:01 [?] , 608:01 [?] , 609:01 [?] , 610:01 [?] , 611:01 [?] , 612:01 [?] , 613:01 [?] , 614:01 [?] , 615:01, 616:01 [?] , 617:01 [?] , 618:01 [?] , 619:01 [?] , 620:01 [?] , 621:01 [?] , 622:01 [?] , 623:01 [?] , 624:01 [?] , 625:01 [?] , 626:01 [?] , 627:01 [?] , 628:01 [?] , 629:01 [?] , 630:01 [?] , 631:01 [?] , 632:01 [?] , 633:01 [?] , 634:01 [?] , 635:01 [?] , 636:01 [?] , 637:01 [?] , 638:01 [?] , 639:01 [?] , 640:01, 641:01 [?] , 642:01 [?] , 643:01 [?] , 644:01 [?] , 645:01 [?] , 646:01 [?] , 647:01, 649:01, 651:01, 653:01, 654:01, 655:01 [?] , 656:01 [?] , 657:01N [?] , 658:01 [?] , 659:01 [?] , 660:01 [?] , 661:01N [?] , 662:01 [?] , 663:01 [?] , 664:01 [?]
83	160 bp	430 bp	*04:01:01:01-04:01:33, 11:01:01-11:01:04, 15:01:01-15:01:02, 24:01, 27:01, 28:01, 31:01, 33:01:01:01-33:01:01:02, 39:01:01-39:01:02, 40:01, 49:01:01:01-49:01:01:03, 51:01, 53:01, 66:01, 72:01:01:01- 72:01:01:03, 74:01, 81:01:01:01-81:01:01:02, 85:01:01:01-85:01:02, 89:01, 96:01, 99:01, 102:01, 117:01, 120:01N, 121:01, 126:01, 139:01, 147:01, 149:01, 156:01, 158:01, 169:01, 172:01, 174:01, 175:01, 176:01, 177:01, 178:01, 179:01, 180:01, 181:01, 192:01, 193:01, 194:01, 195:01, 198:01, 199:01, 202:01, 204:01, 205:01, 206:01, 207:01, 212:01, 213:01, 214:01, 215:01, 224:01, 225:01, 228:01, 229:01, 230:01, 232:01, 240:01, 247:01, 250:01, 253:01, 254:01, 255:01, 262:01, 264:01, 268:01, 272:01, 275:01, 276:01,

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Lot-specific information

			277:01, 279:01:01-279:01:02, 280:01, 281:01, 282:01, 283:01, 287:01, 290:01, 294:01, 296:01, 298:01, 299:01, 302:01, 303:01, 305:01, 319:01, 320:01, 323:01, 328:01N, 334:01, 335:01, 336:01, 337:01, 341:01, 345:01, 348:01:01-348:01:02, 350:01, 354:01:01-354:01:02, 355:01, 356:01, 357:01N, 360:01, 370:01, 372:01, 375:01, 376:01, 378:01, 387:01, 388:01, 396:01, 397:01, 398:01, 399:01, 415:01, 418:01, 425:01, 426:01, 427:01, 428:01, 434:01, 437:01, 450:01N, 453:01, 454:01, 455:01N, 456:01, 459:01, 464:01, 465:01, 468:01, 471:01, 474:01, 475:01, 476:01, 479:01, 480:01, 482:01, 485:01, 486:01, 487:01, 493:01, 512:01, 517:01, 520:01, 521:01, 522:01, 523:01, 524:01, 529:01, 531:01, 534:01, 553:01, 554:01, 555:01, 556:01, 559:01, 561:01, 566:01, 569:01, 574:01, 575:01, 578:01, 583:01, 584:01, 585:01, 591:01, 592:01, 593:01, 607:01, 614:01, 615:01, 618:01, 623:01, 625:01, 633:01, 642:01, 643:01, 644:01, 649:01, 654:01, 658:01, 663:01
	215 bp		*169:01
84	200 bp 260 bp	430 bp	*180:01, 418:01, 432:01, 604:01 *177:01, 186:01, 338:01
85⁴	110 bp 190 bp 260 bp 285 bp	515 bp	*572:01 *175:01, 419:01, 429:01, 498:01 *171:01 *08:01 [?] , 53:01 [?] , 60:01 [?] , 62:01 [?] , 73:01 [?] , 75:01 [?] , 102:01 [?] , 237:01, 585:01
86⁴	125 bp 170 bp 195 bp 225 bp	430 bp	*190:01 *485:01 *354:01:01-354:01:02, 375:01, 480:01, 531:01, 663:01 *360:01, 520:01
87	145 bp 230 bp	430 bp	*327:01 *329:01
88⁴	80 bp	430 bp	*15:01:01-15:01:02, 18:01, 28:01, 40:01, 53:01, 62:01, 74:01, 139:01, 198:01, 290:01, 292:01, 296:01, 299:01, 333:01, 347:01, 387:01, 471:01, 482:01, 499:01, 512:01, 526:01, 585:01, 644:01
89⁷	240 bp	430 bp	*187:01, 357:01N, 401:01N
90⁴	80 bp 215 bp	430 bp	*571:01 *415:01, 534:01
91	145 bp 220 bp	430 bp	*464:01, 535:01 *534:01
92⁴	115 bp 165 bp 230 bp	430 bp	*403:01N *445:01 *533:01
93⁷	225 bp 255 bp	430 bp	*404:01, 598:01N, 661:01N *450:01N
94	160 bp	430 bp	*01:01:01:01-01:01:04, 01:01:06, 26:01:01-26:01:03, 56:01, 65:01:01-65:01:02, 76:01, 90:01:01-90:01:02, 92:01, 118:01, 122:01, 125:01, 127:01, 142:01, 150:01, 159:01N, 162:01:01-162:01:02, 203:01, 220:01, 267:01, 288:01, 291:01, 306:01, 315:01, 326:01, 327:01, 346:01, 363:01, 377:01, 385:01, 403:01N, 411:01, 417:01, 436:01, 440:01, 442:01, 462:01, 470:01, 481:01, 483:01, 490:01, 499:01, 514:01, 516:01, 536:01, 542:01, 543:01, 562:01, 609:01, 616:01, 626:01, 631:01, 632:01, 636:01, 661:01N *454:01, 486:01
	190 bp 240 bp		*08:01, 57:01, 65:01:01-65:01:02, 68:01, 73:01, 75:01, 84:01, 150:01, 188:01, 234:01, 285:01, 306:01, 377:01, 442:01, 499:01, 620:01, 626:01, 648:01:01-648:01:02
	270 bp		*454:01, 486:01

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Lot No.: **7F7**

Lot-specific information

95	140 bp	430 bp	*13:01:01-13:01:02, 107:01, 117:01, 133:01, 160:01, 172:01, 173:01, 198:01 ^w , 206:01, 246:01, 247:01, 269:01, 287:01, 362:01, 389:01 ^w , 393:01, 438:01, 441:01, 449:01, 474:01, 503:01, 514:01, 518:01, 519:01, 544:01, 561:01, 564:01, 565:01, 597:01, 600:01, 609:01, 612:01, 631:01, 633:01, 634:01, 663:01 ^w
	220 bp		*06:01:01:01-06:01:04, 13:01:01-13:01:02, 21:01, 29:01, 37:01, 44:01, 88:01, 93:01, 107:01, 109:01, 110:01, 117:01, 133:01, 160:01, 161:01N, 198:01, 200:01, 206:01, 208:01, 246:01, 247:01, 249:01, 269:01, 295:01, 347:01, 349:01, 362:01, 371:01, 389:01, 393:01, 413:01, 438:01, 448:01, 449:01, 518:01, 519:01, 544:01, 546:01, 550:01, 561:01, 563:01, 564:01, 565:01, 566:01, 567:01, 597:01, 600:01, 601:01, 608:01, 609:01, 612:01, 631:01, 633:01, 634:01, 662:01, 663:01
96⁸	-	-	Negative Control

¹Alleles are assigned by the presence of specific PCR product(s). However, the sizes of the specific PCR products may be helpful in the interpretation of DPB1 SSP typings.

When the primers in a primer mix can give rise to HLA-specific PCR products of more than one length this is indicated if the size difference is more than 20 base pairs. Size differences of 20 base pairs or less are not given. For high resolution SSP kits, the alleles listed are specified according to amplicon length.

Nonspecific amplifications, i.e. a ladder or a smear of bands, may sometimes be seen. GC-rich primers have a higher tendency of giving rise to nonspecific amplifications than other primers.

PCR fragments longer than the control bands may sometimes be observed. Such bands should be disregarded and do not influence the interpretation of the SSP typings.

PCR fragments migrating faster than the control bands, but slower than a 400 bp fragment may be seen in some gel read-outs. Such bands can be disregarded and do not influence the interpretation of the SSP typings.

Some primers may give rise to primer oligomer artifacts. Sometimes this phenomenon is an inherent feature of the primer pair(s) of a primer mix. More often it is due to other factors such as too low amount of DNA in the PCR reactions, taking too long time in setting up the PCR reactions, working at elevated room temperature or using thermal cyclers that are not pre-heated.

²The internal positive control primer pairs amplify segments of the human growth hormone gene. The internal positive control bands are 430 or 515 base pairs respectively, well distribution as outlined in the table. Well number 1 contains the longer, 515 bp, internal positive control band. The well distribution of the internal controls can help in orientation of the kit on gel photo, as well as allow for kit identification. In the presence of a specific amplification the intensity of the control band often decreases.

³For several DPB1 alleles 1st and/or 3rd exon(s) and beyond, as well as intron nucleotide sequences, are not available and thus the primer pairs in primer mixes 57, 58, 59, 60, 62 and 82 may amplify other DPB1 alleles. In these instances it is not known whether some of the primers of the SSP sets are completely matched with the target sequences or not. Assumption is made that unknown sequences in these regions are conserved within allelic groups.

⁴HLA-specific PCR products shorter than 125 base pairs have a lower intensity and are less sharp than longer PCR products.

⁵Primer mixes 9, 27, 43 and 47 may give rise to a lower yield of HLA-specific PCR product than the other DPB1 primer mixes.

⁶Primer mixes 26, 41 and 80 have a tendency of giving rise to primer oligomer formation.

⁷Primer mixes 23, 25, 32, 41, 42, 45, 49, 50, 62, 68, 89 and 93 may have tendencies of unspecific amplifications.

⁸Primer mix 96 contains a negative control, which will amplify more than 95% of HLA amplicons as well as the amplicons generated by the control primer pairs matching the human growth hormone gene. HLA-specific PCR product sizes range from 75 to 200 base pairs and the PCR product generated by the HGH positive control primer pair is 430 base pairs.

^w, might be weakly amplified.

[?], nucleotide sequence information not available for the primer matching sequence.

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Lot No.: **7F7**

Lot-specific information

PRIMER SPECIFICATION

Well No.	1	2	3	4	5	6	7	8	9	10	11	12
Length of spec. PCR product	245	220	140	140	235	165	160	210	165	220	145	80
											185	
Length of int. pos. control ¹	515	515	430	430	515	430	430	515	430	515	515	515
5'-primer(s) ²	9(112) 5'-TgT 3'	9(112) 5'-TgT 3'	21(150) 5'-ACA 3'	36(194) 5'-CgC 3'	11(119) 5'-ggg 3'	35(191) 5'-gTA 3'	36(194) 5'-CgC 3'	9(113) 5'-TTT 3'	35(190) 5'-AgC 3'	9(113) 5'-TTT 3'	35(191) 5'-gTT 3'	55(252) 5'-gAT 3'
	9(112) 5'-TgT 3'	9(112) 5'-TgT 3'		36(194) 5'-CgC 3'	11(119) 5'-ggg 3'	35(191) 5'-gTA 3'	36(194) 5'-CgC 3'		36(194) 5'-CgT 3'			55(252) 5'-gAC 3'
												55(252) 5'-gAT 3'
3'-primer(s) ³	76(315) 5'-CAT 3'	69(292) 5'-CTT 3'	55(251) 5'-Cag 3'	69(292) 5'-CTT 3'	76(313) 5'-CAC 3'	76(313) 5'-CAC 3'	76(313) 5'-CAC 3'	65(280) 5'-TAT 3'	76(313) 5'-CAT 3'	69(292) 5'-CTC 3'	69(293) 5'-gCC 3'	69(292) 5'-CTC 3'
				69(292) 5'-CTT 3'	76(315) 5'-CAT 3'	76(315) 5'-CAT 3'	76(315) 5'-CAT 3'	65(280) 5'-gAT 3'	76(313) 5'-TAT 3'		84(337) 5'-gTT 3'	
					76(315) 5'-Cag 3'			65(280) 5'-AAT 3'	76(315) 5'-Cag 3'		84(338) 5'-CgC 3'	
								65(281) 5'-ggT 3'				
Well No.	1	2	3	4	5	6	7	8	9	10	11	12

Well No.	13	14	15	16	17	18	19	20	21	22	23	24
Length of spec. PCR product	180	105	200	80	260	180	200	235	100	185	145	195
		175		165							210	265
				210								
Length of int. pos. control ¹	430	430	430	430	515	430	430	515	430	430	430	515
5'-primer(s) ²	9(113) 5'-TTT 3'	11(119) 5'-gTT 3'	28(169) 5'-gAg 3'	12(121) 5'-gAT 3'	11(119) 5'-gTT 3'	11(119) 5'-gTT 3'	11(119) 5'-gTT 3'	11(119) 5'-gTT 3'	57(258) 5'-gAC 3'	36(194) 5'-CgC 3'	12(121) 5'-gAT 3'	9(113) 5'-TTT 3'
		11(119) 5'-gTT 3'	35(190) 5'-AgC 3'	28(169) 5'-gAg 3'	11(119) 5'-gTT 3'	11(119) 5'-gTT 3'	11(119) 5'-gTT 3'	11(119) 5'-gTT 3'		36(194) 5'-CgC 3'	12(122) 5'-ACA 3'	
		35(190) 5'-AgC 3'		56(254) 5'-TgA 3'							35(190) 5'-AgC 3'	
3'-primer(s) ³	55(252) 5'-gCC 3'	55(252) 5'-gCC 3'	84(338) 5'-CgC 3'	69(292) 5'-CTT 3'	84(338) 5'-CgT 3'	57(258) 5'-TAg 3'	65(280) 5'-gAg 3'	76(315) 5'-CAT 3'	76(315) 5'-CAT 3'	84(338) 5'-CgC 3'	69(292) 5'-CTT 3'	60(265) 5'-gTg 3'
				69(292) 5'-CTT 3'							69(292) 5'-CTT 3'	84(338) 5'-CgT 3'
Well No.	13	14	15	16	17	18	19	20	21	22	23	24

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Lot No.: 7F7

Lot-specific information

Well No.	25	26	27	28	29	30	31	32	33	34	35	36
Length of spec.	200	75	95	200	105	185	120	75	105	210	195	260
PCR product	265	205	215	260	220		215	200	140			
			240					260	195			
Length of int.	515	515	430	430	515	430	515	430	430	430	430	515
pos. control ¹												
5'-primer(s) ²	9(112) 5'-Tgg 3'	15(130) 5'-AAG 3'	10(116) 5'-CCg 3'	11(119) 5'-gTT 3'	9(112) 5'-TgC 3'	9(112) 5'-TgC 3'	26(164) 5'-ggT 3'	9(113) 5'-TTC 3'	15(130) 5'-AAG 3'	9(112) 5'-TgC 3'	33(184) 5'-ggC 3'	11(119) 5'-ggg 3'
	28(169) 5'-gAg 3'	57(258) 5'-gAC 3'	11(119) 5'-ggg 3'	11(119) 5'-gTT 3'	107(406) 5'-CCT 3'		57(258) 5'-gAg 3'	14(127) 5'-AgC 3'	22(151) 5'-CAT 3'		33(184) 5'-ggC 3'	11(119) 5'-ggg 3'
	35(190) 5'-AgC 3'	60(265) 5'-ggC 3'	16(133) 5'-gCC 3'					32(181) 5'-ACT 3'	36(194) 5'-CgC 3'			11(119) 5'-ggg 3'
			18(139) 5'-Cgg 3'					33(184) 5'-ggC 3'	36(194) 5'-CgC 3'			
			57(258) 5'-gAC 3'					33(184) 5'-ggC 3'				
								73(305) 5'-gCT 3'				
3'-primer(s) ³	84(338) 5'-CgT 3'	69(292) 5'-CTC 3'	76(313) 5'-CAT 3'	65(280) 5'-gAT 3'	69(292) 5'-CTC 3'	57(258) 5'-TAG 3'	84(338) 5'-CgT 3'	84(338) 5'-CgT 3'	57(258) 5'-TAG 3'	65(280) 5'-gAg 3'	84(338) 5'-CgA 3'	84(338) 5'-CgA 3'
			76(313) 5'-TAT 3'	84(337) 5'-gTT 3'	128(470) 5'-ATT 3'		84(338) 5'-CgT 3'		69(292) 5'-CTC 3'			
									85(341) 5'-gCC 3'			
Well No.	25	26	27	28	29	30	31	32	33	34	35	36

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Lot-specific information

Well No.	37	38	39	40	41	42	43	44	45	46	47	48
Length of spec.	160	95	210	135	75	140	190	115	120	75	165	115
PCR product	185	170		180	225	185		155	160	210	215	210
		200		230	250	210		185	190			280
					280	245		210	240			
						285		240				
								270				
Length of int.	430	515	515	430	515	430	430	430	430	430	430	430
pos. control ¹												
5'-primer(s) ²	36(194) 5'-CgC 3'	35(190) 5'-AgC 3'	9(113) 5'-TTT 3'	9(112) 5'-TgC 3'	1 st I 5'-CAT 3'	9(113) 5'-TTT 3'	35(190) 5'-AgC 3'	7(108) 5'-TAA 3'	17(136) 5'-ACA 3'	9(113) 5'-TTT 3'	35(190) 5'-AgC 3'	11(119) 5'-gTT 3'
	36(194) 5'-CgC 3'	36(194) 5'-CgT 3'		37(197) 5'-gCC 3'				10(115) 5'-TCT 3'	17(137) 5'-CgT 3'	56(254) 5'-TgA 3'		11(119) 5'-gTT 3'
		39(202) 5'-TCT 3'						17(136) 5'-ACC 3'	35(191) 5'-gTA 3'			
								17(136) 5'-ACC 3'	35(191) 5'-gTA 3'			
								18(140) 5'-gTg 3'	45(220) 5'-Agg 3'			
								28(169) 5'-gAg 3'	56(254) 5'-TgT 3'			
								32(182) 5'-CCC 3'	57(258) 5'-gAC 3'			
								32(182) 5'-CCA 3'				
3'-primer(s) ³	76(313) 5'-TAT 3'	55(251) 5'-CAG 3'	65(280) 5'-gAg 3'	55(252) 5'-gCC 3'	12(122) 5'-gCA 3'	43(214) 5'-CCA 3'	84(338) 5'-CgA 3'	55(251) 5'-CAG 3'	84(338) 5'-CgC 3'	64(277) 5'-gTg 3'	76(315) 5'-CAT 3'	35(191) 5'-CgA 3'
	84(338) 5'-CgA 3'	79(324) 5'-TTC 3'		69(292) 5'-CTT 3'	62(271) 5'-CTA 3'	57(257) 5'-ACA 3'	91(359) 5'-ggT 3'	55(252) 5'-gCC 3'		65(280) 5'-gAA 3'	92(362) 5'-CTg 3'	67(286) 5'-CTA 3'
		80(326) 5'-AgC 3'		76(313) 5'-TAT 3'	67(286) 5'-CTT 3'	63(275) 5'-CCg 3'		84(338) 5'-CgT 3'		65(281) 5'-ggT 3'		91(359) 5'-ggT 3'
		81(330) 5'-TCT 3'			70(295) 5'-CCA 3'	67(286) 5'-CTT 3'				69(293) 5'-gCC 3'		
		88(350) 5'-ggA 3'			72(301) 5'-CAA 3'	77(316) 5'-gCg 3'						
					78(320) 5'-gTg 3'	91(359) 5'-ggT 3'						
					84(337) 5'-gCT 3'							
Well No.	37	38	39	40	41	42	43	44	45	46	47	48

101.311-24/04 – including *Taq* pol., IFU-01
 101.311-24u/04u – without *Taq* pol., IFU-02

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Lot No.: **7F7**

Lot-specific information

Well No.	49	50	51	52	53	54	55	56	57	58	59	60
Length of spec.	95	160	170	130	90	115	135	145	255	95	80	255
PCR product	130	210	225	160	145	185	165	180				
	205			215	185	210	190	230				
					205							
Length of int.	430	430	430	430	430	430	430	430	430	430	430	430
pos. control ¹												
5'-primer(s) ²	8(109)	11(119)	8(110)	7(107)	36(194)	36(194)	17(136)	9(113)	107(406)	-22(24)	191(660)	107(406)
	5'-ACA 3'	5'-ggg 3'	5'-CCg 3'	5'-TTg 3'	5'-CgT 3'	5'-CgC 3'	5'-ACA 3'	5'-TTT 3'	5'-CCT 3'	5'-gCA 3'	5'-gAT 3'	5'-CCT 3'
	9(114)	23(155)	10(115)	8(110)		36(194)	22(151)					
	5'-TTA 3'	5'-gCA 3'	5'-TCT 3'	5'-CCg 3'		5'-CgC 3'	5'-CAT 3'					
	33(184)	29(173)	26(163)	10(115)		57(258)	27(166)					
	5'-ggC 3'	5'-CAg 3'	5'-TgC 3'	5'-TCT 3'		5'-gAC 3'	5'-AgT 3'					
	37(197)		27(166)	14(129)			30(175)					
	5'-gCA 3'		5'-AgT 3'	5'-gAC 3'			5'-TCC 3'					
	47(226)			30(175)			37(197)					
	5'-ggA 3'			5'-TCC 3'			5'-gCT 3'					
				39(204)								
				5'-gAA 3'								
3'-primer(s) ³	65(280)	65(280)	69(292)	69(292)	53(245)	79(323)	69(292)	44(217)	178(619)	-5(76)	205(700)	178(619)
	5'-gAT 3'	5'-gAT 3'	5'-CTC 3'	5'-CTC 3'	5'-gCT 3'	5'-TgC 3'	5'-CTC 3'	5'-CTT 3'	5'-CAT 3'	5'-CAC 3'	5'-CAT 3'	5'-CAG 3'
		69(292)			68(289)	85(340)		45(220)				
		5'-CTC 3'			5'-CTT 3'	5'-CTA 3'		5'-gAT 3'				
					74(308)	85(340)		55(252)				
					5'-TgC 3'	5'-CTg 3'		5'-TCC 3'				
					75(310)	85(341)		71(299)				
					5'-CCC 3'	5'-gCT 3'		5'-CTT 3'				
					79(322)	92(361)		73(305)				
					5'-gTA 3'	5'-TCA 3'		5'-CCC 3'				
					85(340)	2 nd I						
					5'-CCT 3'	5'-C 3'						
					85(341)							
					5'-CCC 3'							
					90(355)							
					5'-CTC 3'							
					91(358)							
					5'-gCC 3'							
Well No.	49	50	51	52	53	54	55	56	57	58	59	60

101.311-24/04 – including *Taq* pol., IFU-01
 101.311-24u/04u – without *Taq* pol., IFU-02

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Lot No.: **7F7**

Lot-specific information

Well No.	61	62	63	64	65	66	67	68	69	70	71	72
Length of spec.	145	260	210	145	170	185	90	175	180	75	140	145
PCR product	225		245	180	205	235	155	200	215	115	180	175
			275	215	240	280	180	265	245	155	260	255
										180		
										205		
										260		
Length of int.	430	515	515	430	430	515	430	430	515	430	430	430
pos. control ¹												
5'-primer(s) ²	116(433)	107(406)	9(113)	9(113)	9(113)	9(113)	36(194)	9(112)	12(122)	12(121)	9(112)	12(122)
	5'-gCT 3'	5'-CCC 3'	5'-TTT 3'	5'-TTT 3'	5'-TTT 3'	5'-TTT 3'	5'-CgT 3'	5'-TgT 3'	5'-ACC 3'	5'-gAT 3'	5'-TgT 3'	5'-ACC 3'
	144(517)							31(179)	17(137)	29(172)		14(127)
	5'-CCT 3'							5'-CAg 3'	5'-CgT 3'	5'-ACg 3'		5'-AgC 3'
								32(181)	26(165)	37(197)		17(136)
								5'-ACT 3'	5'-gAC 3'	5'-gCA 3'		5'-ACA 3'
								37(197)	35(192)	41(210)		39(202)
								5'-gCA 3'	5'-TTA 3'	5'-gAA 3'		5'-TCC 3'
								41(208)	41(208)	45(220)		49(232)
								5'-gCC 3'	5'-gCC 3'	5'-Agg 3'		5'-Tgg 3'
								41(210)		46(223)		
								5'-gAA 3'		5'-TCT 3'		
										59(264)		
										5'-TgA 3'		
										73(305)		
										5'-gCT 3'		
3'-primer(s) ³	178(619)	179(624)	66(284)	44(217)	48(230)	53(245)	52(241)	84(338)	84(338)	84(338)	42(212)	84(338)
	5'-CAg 3'	5'-CTg 3'	5'-CCT 3'	5'-CTT 3'	5'-TCg 3'	5'-gCT 3'	5'-CCT 3'	5'-CgC 3'	5'-CgC 3'	5'-CgC 3'	5'-CCC 3'	5'-CgT 3'
			66(284)	47(227)	51(238)	60(265)	74(308)				44(217)	
			5'-CCg 3'	5'-CCT 3'	5'-CAC 3'	5'-gTC 3'	5'-TgC 3'				5'-CTg 3'	
			78(319)	52(241)	52(241)	73(305)	79(323)				55(251)	
			5'-TCA 3'	5'-CCT 3'	5'-CCT 3'	5'-CCC 3'	5'-TgA 3'				5'-CAA 3'	
			85(341)	60(266)	53(245)	88(350)	81(330)				82(331)	
			5'-gCg 3'	5'-TgC 3'	5'-gCg 3'	5'-ggT 3'	5'-TCT 3'				5'-CTg 3'	
			88(350)	67(287)	64(278)	90(355)	83(335)					
			5'-ggT 3'	5'-CCg 3'	5'-TgC 3'	5'-CTA 3'	5'-CCg 3'					
					75(312)							
					5'-ATA 3'							
Well No.	61	62	63	64	65	66	67	68	69	70	71	72

101.311-24/04 – including *Taq* pol., IFU-01
 101.311-24u/04u – without *Taq* pol., IFU-02

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Lot No.: **7F7**

Lot-specific information

Well No.	73	74	75	76	77	78	79	80	81	82	83	84
Length of spec.	170	115	140	120	120	145	75	160	65	80	160	200
PCR product	190	160		180	170	180	115	250	95		215	260
		215		220	220	220	170		145			
				250	260	255	245		180			
									205			
									260			
									285			
Length of int.	430	430	430	430	430	430	515	430	430	430	430	430
pos. control ¹												
5'-primer(s) ²	35(191) 5'-gTT 3'	16(133) 5'-gCC 3'	36(194) 5'-CgT 3'	14(127) 5'-AgA 3'	11(119) 5'-gTT 3'	12(122) 5'-ACA 3'	12(122) 5'-ACA 3'	14(127) 5'-AgA 3'	9(112) 5'-TgT 3'	191(660) 5'-gAT 3'	18(139) 5'-Cgg 3'	9(113) 5'-TTT 3'
		20(146) 5'-TgC 3'	36(194) 5'-CgT 3'	25(160) 5'-TCg 3'	22(152) 5'-ACT 3'	22(152) 5'-ACg 3'	20(145) 5'-ATA 3'	40(207) 5'-Agg 3'	35(191) 5'-gTT 3'		36(194) 5'-CgC 3'	
		33(184) 5'-ggA 3'	36(194) 5'-CgT 3'	36(193) 5'-TCC 3'	24(159) 5'-TTg 3'	26(163) 5'-TgA 3'	37(197) 5'-gCC 3'	42(211) 5'-ACA 3'			36(194) 5'-CgC 3'	
		34(187) 5'-AgA 3'		36(193) 5'-TCT 3'	42(211) 5'-ACA 3'	36(193) 5'-TCA 3'	41(208) 5'-gCT 3'	42(212) 5'-CgC 3'				
		37(197) 5'-gCT 3'		40(207) 5'-AgA 3'	57(258) 5'-gAC 3'	40(207) 5'-AgA 3'	42(212) 5'-CgC 3'	45(220) 5'-AgC 3'				
		51(238) 5'-Agg 3'		41(208) 5'-gCT 3'		41(208) 5'-gCA 3'	59(264) 5'-TgA 3'	46(223) 5'-TCT 3'				
				57(258) 5'-gAC 3'		49(233) 5'-gAT 3'	73(305) 5'-gCT 3'	49(233) 5'-gAT 3'				
3'-primer(s) ³	78(321) 5'-TgA 3'	76(313) 5'-CAT 3'	69(292) 5'-CTT 3'	84(338) 5'-CgC 3'	84(338) 5'-CgC 3'	84(338) 5'-CgC 3'	84(338) 5'-CgC 3'	84(338) 5'-CgC 3'	44(217) 5'-CTg 3'	205(700) 5'-CAC 3'	76(313) 5'-CAT 3'	60(265) 5'-gTC 3'
	84(338) 5'-CgA 3'								53(245) 5'-gCT 3'			63(275) 5'-CCg 3'
	85(340) 5'-CCg 3'								82(331) 5'-CTg 3'			64(278) 5'-TgC 3'
	85(340) 5'-CCA 3'								85(340) 5'-CCA 3'			80(326) 5'-AgC 3'
	85(341) 5'-gCC 3'								90(355) 5'-CTT 3'			82(331) 5'-CTT 3'
	85(341) 5'-gCg 3'											84(337) 5'-gCT 3'
Well No.	73	74	75	76	77	78	79	80	81	82	83	84

101.311-24/04 – including *Taq* pol., IFU-01
 101.311-24u/04u – without *Taq* pol., IFU-02

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Lot No.: **7F7**

Lot-specific information

Well No.	85	86	87	88	89	90	91	92	93	94	95
Length of spec.	110	125	145	80	240	80	145	115	225	160	140
PCR product	190	170	230			215	220	165	255	190	220
	260	195						230		240	
	285	225								270	
Length of int. pos. control ¹	515	430	430	430	430	430	430	430	430	430	430
5'-primer(s) ²	9(113) 5'-TTT 3'	22(152) 5'-ACT 3'	21(149) 5'-gAT 3'	72(301) 5'-CAG 3'	11(119) 5'-ggg 3'	107(406) 5'-CCT 3'	107(406) 5'-CCT 3'	43(214) 5'-TgC 3'	13(124) 5'-ggT 3'	9(113) 5'-TTT 3'	9(112) 5'-TgT 3'
	107(406) 5'-CCC 3'	26(165) 5'-gAC 3'	49(232) 5'-Tgg 3'		11(119) 5'-ggg 3'			59(264) 5'-TgA 3'	22(151) 5'-CAT 3'	36(194) 5'-CgC 3'	35(191) 5'-gTA 3'
		33(184) 5'-ggC 3'						117(436) 5'-ACA 3'	25(161) 5'-CCA 3'	36(194) 5'-CgC 3'	
		41(208) 5'-gCA 3'							27(166) 5'-AAT 3'		
		56(254) 5'-TgA 3'									
3'-primer(s) ³	59(264) 5'-TTg 3'	84(338) 5'-CgC 3'	84(338) 5'-CgT 3'	84(338) 5'-CgA 3'	77(317) 5'-TgA 3'	119(443) 5'-AAC 3'	141(508) 5'-CAT 3'	84(338) 5'-CgT 3'	84(338) 5'-CgT 3'	76(313) 5'-TAC 3'	69(292) 5'-CTC 3'
	83(334) 5'-CAC 3'				81(330) 5'-TCC 3'	162(572) 5'-ggT 3'	141(509) 5'-ACC 3'	179(624) 5'-CTg 3'		83(334) 5'-CAC 3'	
	92(362) 5'-CTT 3'					167(586) 5'-ATT 3'	167(586) 5'-ATT 3'			85(341) 5'-gCT 3'	
	129(474) 5'-AAg 3'										
	158(561) 5'-AgT 3'										
	187(646) 5'-CTC 3'										
Well No.	85	86	87	88	89	90	91	92	93	94	95

¹The internal positive control primer pairs amplify segments of the human growth hormone gene. The internal positive control bands are 430 or 515 base pairs respectively, well distribution as outlined in the table. Well number 1 contains the longer, 515 bp, internal positive control band. The well distribution of the internal controls can help in orientation of the kit on gel photo, as well as allow for kit identification. In the presence of a specific amplification the intensity of the control band often decreases.

²The nucleotide position matching the specificity-determining 3'-end of the primer is given. Nucleotide numbering as on the www.ebi.ac.uk/imgt/hla web site. The sequence of the 3 terminal nucleotides of the primer is given.

³The nucleotide position matching the specificity-determining 3'-end of the primer is given in the anti-sense direction. Nucleotide numbering as on the www.ebi.ac.uk/imgt/hla web site. The sequence of the 3 terminal nucleotides of the primer is given.

101.311-24/04 – including *Taq* pol., IFU-01
101.311-24u/04u – without *Taq* pol., IFU-02

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Lot No.: **7F7**

Lot-specific information

CELL LINE VALIDATION SHEET																				
DPB1 SSP kit ²																				
					Well ³															
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
				Prod. No.:	201668301	201668302	201777603	201668304	201668305	201668306	201668307	201668308	201668309	201786310	201668311	201786312	201668313	201777614	201786315	201668316
	IHCW cell line ¹		DPB1																	
1	9001	SA	*04:02		-	-	-	-	-	-	-	+	+	-	+	-	-	-	-	+
2	9280	LK707	*04:01		-	-	+	+	-	-	-	+	-	-	+	-	-	-	-	-
3	9011	E4181324	*02:01	*04:01	-	-	+	+	-	-	-	+	-	+	+	+	-	-	-	-
4	9275	GU373	*04:02	*17:01	-	-	-	-	-	-	-	+	+	-	+	+	-	-	-	+
5	9009	KAS011	*04:01	*14:01	-	-	+	+	-	-	-	+	-	-	+	-	-	-	-	+
6	9353	SM	*05:01		-	-	-	-	-	-	-	+	+	-	-	-	+	+	-	-
7	9020	QBL	*02:02		-	-	-	-	-	-	-	+	+	+	-	-	+	+	+	-
8	9025	DEU	*04:01		-	-	+	+	-	-	-	+	-	-	+	-	-	-	-	-
9	9026	YAR	*04:01		-	-	+	+	-	-	-	+	-	-	+	-	-	-	-	-
10	9107	LKT3	*05:01		-	-	-	-	-	-	-	+	+	-	-	-	+	+	-	-
11	9051	PITOUT	*04:01		-	-	+	+	-	-	-	+	-	-	+	-	-	-	-	-
12	9052	DBB	*04:01		-	-	+	+	-	-	-	+	-	-	+	-	-	-	-	-
13	9004	JESTHOM	*04:01		-	-	+	+	-	-	-	+	-	-	+	-	-	-	-	-
14	9071	OLGA	*03:01	*04:02	+	+	-	-	-	-	-	+	+	-	+	-	-	-	-	+
15	9075	DKB	*04:01		-	-	+	+	-	-	-	+	-	-	+	-	-	-	-	-
16	9037	SWEIG007	*04:02		-	-	-	+	-	-	-	+	+	-	+	-	-	-	-	+
17	9282	CTM3953540	*01:01	*02:01	+	+	+	+	+	+	+	+	+	+	+	+	-	-	-	-
18	9257	32367	*04:02	*18:01	-	+	-	-	-	-	-	+	+	-	+	-	-	-	-	+
19	9038	BM16	*02:01		-	-	-	-	-	-	-	+	+	+	+	+	-	-	-	-
20	9059	SLE005	*03:01		+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	+
21	9064	AMALA	*04:02		-	-	-	-	-	-	-	+	+	-	+	-	-	-	-	+
22	9056	KOSE	*02:01	*13:01	+	-	+	-	-	+	+	+	+	+	+	+	+	-	-	-
23	9124	IHL	*02:01		-	-	-	-	-	-	-	+	+	+	+	+	-	-	-	-
24	9035	JBUSH	*04:01		-	-	+	+	-	-	-	+	-	-	+	-	-	-	-	-
25	9049	IBW9	*01:01		+	+	+	+	+	+	+	-	-	-	-	-	-	-	-	-
26	9285	WT49	*04:01		-	-	+	+	-	-	-	+	-	-	+	-	-	-	-	-
27	9191	CH1007	*03:01	*13:01	+	+	+	-	-	+	+	-	-	-	-	-	-	-	-	+
28	9320	BEL5GB	*02:01	*04:01	-	-	+	+	-	-	-	+	+	+	+	+	-	-	-	-
29	9050	MOU	*02:01		-	-	-	-	-	-	-	+	+	+	+	+	-	-	-	-
30	9021	RSH	*01:01	*105:01	+	+	+	+	+	+	+	+	+	+	-	+	-	-	-	+
31	9019	DUCAF	*02:02		-	-	-	-	-	-	-	+	+	+	-	-	+	+	+	-
32	9297	HAG	*02:01	*03:01	+	+	-	-	-	-	-	+	+	+	+	+	-	-	-	+
33	9098	MT14B	*04:02		-	-	-	-	-	-	-	+	+	-	+	-	-	-	-	+
34	9104	DHIF	*04:01		-	-	+	+	-	-	-	+	-	-	+	-	-	-	-	-
35	9302	SSTO	*04:01		-	-	+	+	-	-	-	+	-	-	+	-	-	-	-	-
36	9024	KT17	*05:01		-	-	-	-	-	-	-	+	+	-	-	-	+	+	-	-
37	9065	HHKB	*04:01		-	-	+	+	-	-	-	+	-	-	+	-	-	-	-	-
38	9099	LZL	*04:02		-	-	-	-	-	-	-	+	+	-	+	-	-	-	-	+
39	9315	CML	*04:01	*14:01	-	-	+	+	-	-	-	+	-	-	+	-	-	-	-	+
40	9134	WHONP199	*05:01		-	-	-	-	-	-	-	+	+	-	-	-	+	+	-	-
41	9055	H0301	*05:01		-	-	-	-	-	-	-	+	+	-	-	-	+	+	-	-
42	9066	TAB089	*02:02		-	-	-	-	-	-	-	+	+	+	-	-	+	+	+	-
43	9076	T7526	*13:01		+	-	+	-	-	+	+	-	-	-	-	-	-	-	-	-
44	9057	TEM	*04:01		-	-	+	+	-	-	-	+	-	-	+	-	-	-	-	-
45	9239	SHJO	*03:01	*04:02	+	+	-	-	-	-	-	+	+	-	+	-	-	-	-	+
46	9013	SCHU	*04:02		-	-	-	-	-	-	-	+	+	-	+	-	-	-	-	+
47	9045	TUBO	*02:01	*04:02	-	-	-	-	-	-	-	+	+	+	+	+	-	-	-	+
48	9303	TER-ND	*02:01	*04:01	-	-	+	+	-	-	-	+	+	+	+	+	-	-	-	+

101.311-24/04 – including *Taq* pol., IFU-01
 101.311-24u/04u – without *Taq* pol., IFU-02

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Lot No.: **7F7**

Lot-specific information

CELL LINE VALIDATION SHEET																					
DPB1 SSP kit ²																					
					Prod. No.:	Well ³															
						17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
						201668317	201668318	201668319	201668320	201668321	201668322	201668323	201668324	201668325	201786326	201786327	201668328	201668329	201668330	201668331	201668332
	IHCW cell line ¹		DPB1																		
1	9001	SA	*04:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2	9280	LK707	*04:01			-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	
3	9011	E4181324	*02:01	*04:01		-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	
4	9275	GU373	*04:02	*17:01		+	+	-	-	-	-	-	-	-	-	+	+	+	+	-	
5	9009	KAS011	*04:01	*14:01		+	+	+	+	+	+	-	-	-	-	-	-	-	+	-	
6	9353	SM	*05:01			-	-	-	-	-	-	+	+	+	-	-	-	-	-	+	
7	9020	QBL	*02:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
8	9025	DEU	*04:01			-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	
9	9026	YAR	*04:01			-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	
10	9107	LKT3	*05:01			-	-	-	-	-	-	+	+	+	-	-	-	-	-	+	
11	9051	PITOUT	*04:01			-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	
12	9052	DBB	*04:01			-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	
13	9004	JESTHOM	*04:01			-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	
14	9071	OLGA	*03:01	*04:02		+	+	+	+	+	-	-	-	-	-	-	-	-	-	-	
15	9075	DKB	*04:01			-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	
16	9037	SWEIG007	*04:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
17	9282	CTM3953540	*01:01	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	
18	9257	32367	*04:02	*18:01		-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	
19	9038	BM16	*02:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
20	9059	SLE005	*03:01			+	+	+	+	+	-	-	-	-	-	-	-	-	-	-	
21	9064	AMALA	*04:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
22	9056	KOSE	*02:01	*13:01		+	-	-	+	-	-	-	-	-	-	-	+	-	-	+	
23	9124	IHL	*02:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
24	9035	JBUSH	*04:01			-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	
25	9049	IBW9	*01:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	
26	9285	WT49	*04:01			-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	
27	9191	CH1007	*03:01	*13:01		+	+	+	+	+	-	-	-	-	-	-	+	-	-	+	
28	9320	BEL5GB	*02:01	*04:01		-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	
29	9050	MOU	*02:01			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
30	9021	RSH	*01:01	*105:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	
31	9019	DUCAF	*02:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
32	9297	HAG	*02:01	*03:01		+	+	+	+	+	-	-	-	-	-	-	-	-	-	-	
33	9098	MT14B	*04:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
34	9104	DHIF	*04:01			-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	
35	9302	SSTO	*04:01			-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	
36	9024	KT17	*05:01			-	-	-	-	-	-	+	+	+	-	-	-	-	+	-	
37	9065	HHKB	*04:01			-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	
38	9099	LZL	*04:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
39	9315	CML	*04:01	*14:01		+	+	+	+	+	+	-	-	-	-	-	-	-	+	-	
40	9134	WHONP199	*05:01			-	-	-	-	-	-	+	+	+	-	-	-	-	-	+	
41	9055	H0301	*05:01			-	-	-	-	-	-	+	+	+	-	-	-	-	-	+	
42	9066	TAB089	*02:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
43	9076	T7526	*13:01			+	-	-	+	-	-	-	-	-	-	-	+	-	-	+	
44	9057	TEM	*04:01			-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	
45	9239	SHJO	*03:01	*04:02		+	+	+	+	+	-	-	-	-	-	-	-	-	-	-	
46	9013	SCHU	*04:02			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
47	9045	TUBO	*02:01	*04:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
48	9303	TER-ND	*02:01	*04:01		-	-	-	-	-	+	-	-	-	-	-	-	-	-	-	

101.311-24/04 – including *Taq* pol., IFU-01
 101.311-24u/04u – without *Taq* pol., IFU-02

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Lot No.: **7F7**

Lot-specific information

CELL LINE VALIDATION SHEET																					
DPB1 SSP kit ²																					
					Well ³																
						33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
				Prod. No.:		201668333	201668334	201668335	201668336	201777637	201786338	201668339	201786340	201668341	201668342	201668343	201786344	201668345	201668346	201668347	201668348
	IHCW cell line ¹		DPB1																		
1	9001	SA	*04:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	9280	LK707	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	9011	E4181324	*02:01	*04:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	9275	GU373	*04:02	*17:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	9009	KAS011	*04:01	*14:01	-	+	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
6	9353	SM	*05:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	9020	QBL	*02:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	9025	DEU	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	9026	YAR	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	9107	LKT3	*05:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	9051	PITOUT	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	9052	DBB	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	9004	JESTHOM	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	9071	OLGA	*03:01	*04:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	9075	DKB	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	9037	SWEIG007	*04:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	9282	CTM3953540	*01:01	*02:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	9257	32367	*04:02	*18:01	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-
19	9038	BM16	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	9059	SLE005	*03:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	9064	AMALA	*04:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	9056	KOSE	*02:01	*13:01	+	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-
23	9124	IHL	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	9035	JBUSH	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	9049	IBW9	*01:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	9285	WT49	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	9191	CH1007	*03:01	*13:01	+	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-
28	9320	BEL5GB	*02:01	*04:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	9050	MOU	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	9021	RSH	*01:01	*105:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	9019	DUCAF	*02:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	9297	HAG	*02:01	*03:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33	9098	MT14B	*04:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34	9104	DHIF	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35	9302	SSTO	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	9024	KT17	*05:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37	9065	HHKB	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38	9099	LZL	*04:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	9315	CML	*04:01	*14:01	-	+	-	-	-	-	-	-	+	-	-	-	-	-	-	-	-
40	9134	WHONP199	*05:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	9055	H0301	*05:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42	9066	TAB089	*02:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	9076	T7526	*13:01		+	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-
44	9057	TEM	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	9239	SHJO	*03:01	*04:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46	9013	SCHU	*04:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	9045	TUBO	*02:01	*04:02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48	9303	TER-ND	*02:01	*04:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

101.311-24/04 – including *Taq* pol., IFU-01
101.311-24u/04u – without *Taq* pol., IFU-02

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Lot No.: 7F7

Lot-specific information

CELL LINE VALIDATION SHEET																						
DPB1 SSP kit ²																						
					Well ³																	
						49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	
				Prod. No.:		201786349	201668350	201777651	201777652	201786353	201786354	201777655	201786356	201668357	201668358	201786359	201668360	201668361	201668362	201777663	201786364	
	IHWC cell line ¹		DPB1																			
1	9001	SA	*04:02		-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	
2	9280	LK707	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	
3	9011	E4181324	*02:01	*04:01	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	
4	9275	GU373	*04:02	*17:01	-	-	-	-	-	-	-	-	-	-	+	-	+	-	+	-	-	
5	9009	KAS011	*04:01	*14:01	-	-	-	-	-	-	-	-	-	-	-	-	+	-	+	-	-	
6	9353	SM	*05:01		-	-	-	-	-	-	-	-	-	-	-	+	-	-	+	-	-	
7	9020	QBL	*02:02		-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	
8	9025	DEU	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	
9	9026	YAR	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	
10	9107	LKT3	*05:01		-	-	-	-	-	-	-	-	-	-	-	+	-	-	+	-	-	
11	9051	PITOUT	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	
12	9052	DBB	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	
13	9004	JESTHOM	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	
14	9071	OLGA	*03:01	*04:02	-	-	-	-	-	-	-	-	-	+	-	-	-	-	+	-	-	
15	9075	DKB	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	
16	9037	SWEIG007	*04:02		-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	
17	9282	CTM3953540	*01:01	*02:01	-	+	-	-	-	-	-	-	-	-	-	-	+	-	+	-	-	
18	9257	32367	*04:02	*18:01	-	+	-	-	-	-	-	-	-	-	-	-	+	-	+	-	-	
19	9038	BM16	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	
20	9059	SLE005	*03:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	
21	9064	AMALA	*04:02		-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	
22	9056	KOSE	*02:01	*13:01	-	-	-	-	-	-	-	-	-	-	-	-	+	-	+	-	-	
23	9124	IHL	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	
24	9035	JBUSH	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	
25	9049	IBW9	*01:01		-	+	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	
26	9285	WT49	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	
27	9191	CH1007	*03:01	*13:01	-	-	-	-	-	-	-	-	-	-	+	+	-	-	+	-	-	
28	9320	BEL5GB	*02:01	*04:01	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	
29	9050	MOU	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	
30	9021	RSH	*01:01	*105:01	-	+	-	-	-	-	-	-	-	-	-	-	+	-	+	-	-	
31	9019	DUCAF	*02:02		-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	
32	9297	HAG	*02:01	*03:01	-	-	-	-	-	-	-	-	-	-	-	-	+	-	+	-	-	
33	9098	MT14B	*04:02		-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	
34	9104	DHIF	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	
35	9302	SSTO	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	
36	9024	KT17	*05:01		-	-	-	-	-	-	-	-	-	-	-	+	-	-	+	-	-	
37	9065	HHKB	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	
38	9099	LZL	*04:02		-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	
39	9315	CML	*04:01	*14:01	-	-	-	-	-	-	-	-	-	-	-	-	+	-	+	-	-	
40	9134	WHONP199	*05:01		-	-	-	-	-	-	-	-	-	-	-	+	-	-	+	-	-	
41	9055	H0301	*05:01		-	-	-	-	-	-	-	-	-	-	-	+	-	-	+	-	-	
42	9066	TAB089	*02:02		-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	
43	9076	T7526	*13:01		-	-	-	-	-	-	-	-	-	-	+	-	-	-	+	-	-	
44	9057	TEM	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	
45	9239	SHJO	*03:01	*04:02	-	-	-	-	-	-	-	-	-	-	-	+	+	-	+	-	-	
46	9013	SCHU	*04:02		-	-	-	-	-	-	-	-	-	+	-	-	-	-	-	-	-	
47	9045	TUBO	*02:01	*04:02	-	-	-	-	-	-	-	-	-	+	-	-	+	-	-	-	-	
48	9303	TER-ND	*02:01	*04:01	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	

101.311-24/04 – including *Taq* pol., IFU-01
 101.311-24u/04u – without *Taq* pol., IFU-02

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Lot No.: **7F7**

Lot-specific information

CELL LINE VALIDATION SHEET																					
DPB1 SSP kit ²																					
					Well ³																
						65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
					Prod. No.:	201786365	201777666	201786367	201786368	201786369	201786370	201668371	201668372	201777673	201786374	201668375	201786376	201786377	201786378	201777679	201777680
	IHCW cell line ¹		DPB1																		
1	9001	SA	*04:02		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-
2	9280	LK707	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	9011	E4181324	*02:01	*04:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	9275	GU373	*04:02	*17:01	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-
5	9009	KAS011	*04:01	*14:01	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-
6	9353	SM	*05:01		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-
7	9020	QBL	*02:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	9025	DEU	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	9026	YAR	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	9107	LKT3	*05:01		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-
11	9051	PITOUT	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	9052	DBB	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	9004	JESTHOM	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	9071	OLGA	*03:01	*04:02	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-
15	9075	DKB	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	9037	SWEIG007	*04:02		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-
17	9282	CTM3953540	*01:01	*02:01	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-
18	9257	32367	*04:02	*18:01	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-
19	9038	BM16	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	9059	SLE005	*03:01		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-
21	9064	AMALA	*04:02		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-
22	9056	KOSE	*02:01	*13:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	9124	IHL	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	9035	JBUSH	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	9049	IBW9	*01:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	9285	WT49	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	9191	CH1007	*03:01	*13:01	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-
28	9320	BEL5GB	*02:01	*04:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	9050	MOU	*02:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	9021	RSH	*01:01	*105:01	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-
31	9019	DUCAF	*02:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	9297	HAG	*02:01	*03:01	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-
33	9098	MT14B	*04:02		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-
34	9104	DHIF	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35	9302	SSTO	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	9024	KT17	*05:01		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-
37	9065	HHKB	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38	9099	LZL	*04:02		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-
39	9315	CML	*04:01	*14:01	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-
40	9134	WHONP199	*05:01		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-
41	9055	H0301	*05:01		-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-
42	9066	TAB089	*02:02		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	9076	T7526	*13:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
44	9057	TEM	*04:01		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	9239	SHJO	*03:01	*04:02	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-
46	9013	SCHU	*04:02		-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-
47	9045	TUBO	*02:01	*04:02	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-
48	9303	TER-ND	*02:01	*04:01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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“Instructions for Use” (IFU)

Lot-specific information

CELL LINE VALIDATION SHEET

DPB1 SSP kit²

Well³

Prod. No.:

IHC cell line¹

DPB1

1	9001 SA	*04:02		- + - - - - - -	- - - - - - - -
2	9280 LK707	*04:01		- + + - - - - -	- - - - - - - -
3	9011 E4181324	*02:01	*04:01	- + + - - - - -	- - - - - - - -
4	9275 GU373	*04:02	*17:01	- + - - - - - -	- - - - - - - -
5	9009 KAS011	*04:01	*14:01	- + + - - - - -	- - - - - - - -
6	9353 SM	*05:01		- - - - - - - -	- - - - - - - -
7	9020 QBL	*02:02		- + - - - - - -	- - - - - - - -
8	9025 DEU	*04:01		- + + - - - - -	- - - - - - - -
9	9026 YAR	*04:01		- + + - - - - -	- - - - - - - -
10	9107 LKT3	*05:01		- - - - - - - -	- - - - - - - -
11	9051 PITOUT	*04:01		- + + - - - - -	- - - - - - - -
12	9052 DBB	*04:01		- + + - - - - -	- - - - - - - -
13	9004 JESTHOM	*04:01		- + + - - - - -	- - - - - - - -
14	9071 OLGA	*03:01	*04:02	- + - - - - - -	- - - - - - - -
15	9075 DKB	*04:01		- + + - - - - -	- - - - - - - -
16	9037 SWEIG007	*04:02		- + - - - - - -	- - - - - - - -
17	9282 CTM3953540	*01:01	*02:01	- + - - - - - -	- - - - - - + -
18	9257 32367	*04:02	*18:01	- + - - - - +	- - - - - - - -
19	9038 BM16	*02:01		- + - - - - - -	- - - - - - - -
20	9059 SLE005	*03:01		- + - - - - - -	- - - - - - - -
21	9064 AMALA	*04:02		- + - - - - - -	- - - - - - - -
22	9056 KOSE	*02:01	*13:01	- + - - - - - -	- - - - - - - +
23	9124 IHL	*02:01		- + - - - - - -	- - - - - - - -
24	9035 JBUSH	*04:01		- + + - - - - -	- - - - - - - -
25	9049 IBW9	*01:01		- + - - - - - -	- - - - - - + -
26	9285 WT49	*04:01		- + + - - - - -	- - - - - - - -
27	9191 CH1007	*03:01	*13:01	- + - - - - - -	- - - - - - + -
28	9320 BEL5GB	*02:01	*04:01	- + + - - - - -	- - - - - - - -
29	9050 MOU	*02:01		- + - - - - - -	- - - - - - - -
30	9021 RSH	*01:01	*105:01	- + - - - - - -	- - - - - - + -
31	9019 DUCAF	*02:02		- + - - - - - -	- - - - - - - -
32	9297 HAG	*02:01	*03:01	- + - - - - - -	- - - - - - - -
33	9098 MT14B	*04:02		- + - - - - - -	- - - - - - - -
34	9104 DHIF	*04:01		- + + - - - - -	- - - - - - - -
35	9302 SSTO	*04:01		- + + - - - - -	- - - - - - - -
36	9024 KT17	*05:01		- - - - - - - -	- - - - - - - -
37	9065 HHKB	*04:01		- + + - - - - -	- - - - - - - -
38	9099 LZL	*04:02		- + - - - - - -	- - - - - - - -
39	9315 CML	*04:01	*14:01	- + + - - - - -	- - - - - - - -
40	9134 WHONP199	*05:01		- - - - - - - -	- - - - - - - -
41	9055 H0301	*05:01		- - - - - - - -	*05:- - - - - -
42	9066 TAB089	*02:02		- + - - - - - -	- - - - - - - -
43	9076 T7526	*13:01		- + - - - - - -	- - - - - - + -
44	9057 TEM	*04:01		- + + - - - - -	- - - - - - - -
45	9239 SHJO	*03:01	*04:02	- + - - - - - -	- - - - - - - -
46	9013 SCHU	*04:02		- + - - - - - -	- - - - - - - -
47	9045 TUBO	*02:01	*04:02	+ - - - - - - -	- - - - - - - -
48	9303 TER-ND	*02:01	*04:01	- + + - - - - -	- - - - - - - -

101.311-24/04 – including *Taq* pol., IFU-01
101.311-24u/04u – without *Taq* pol., IFU-02

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Lot No.: 7F7

Lot-specific information

¹The provided cell line HLA specificities are retrieved from the <http://www.ihwg.org/hla> web site. The specificity of an individual cell line may thus be subject to change.

²The specificity of each primer solution in the kit has been tested against 48 well characterized cell line DNAs and where applicable, additional cell line DNAs.

No DNAs carrying the alleles to be amplified by primer solutions 41 to 44, 47, 49, 51 to 56, 61, 63 to 72, 74, 76 to 81, 84 to 87 and 89 to 93 were available.

The specificities of the primers in primer solutions 42, 43, 47, 49, 68 and 86 were tested by separately adding one or two 5'-primers, respectively one 3'-primer. In primer solutions 41, 53, 54, 56, 63 to 67, 71, 81, 84, 85 and 89 to 91 it was only possible to test the 5'-primers, the 3'-primers were not possible to test. In primer solutions 44, 51, 52, 55, 61, 69, 70, 72, 74, 76 to 80, 87, 92 and 93 it was only possible to test the 3'-primers, the 5'-primers were not possible to test. In primer solutions 1, 2, 12, 15, 16, 23, 25 to 27, 31 to 33, 36, 38, 40, 45, 49, 50, 68, 75, 83 and 86 one or more 5'-primers were not possible to test. In primer solutions 5 to 9, 11, 16, 24, 28, 29, 31, 33, 38, 42, 43, 46 to 48, 73 and 94 one or more 3'-primers were not possible to test.

Additional primers in primer solutions 14, 29, 33, 38, 40, 45, 46, 48, 50 and 94 were tested by separately adding 5'-primers or 3'-primers.

³The DPB1*04:02 allele is not amplified by primer mix 57 in the 9275 (GU373), 9257 (32367), 9021 (RSH) and 9239 (SHJO) cell lines. For further details see the specificity table.

The DPB1*04:02 allele is not amplified by primer mix 58 in the 9275 (GU373), 9191 (CH1007) and 9302 (SSTO) cell lines. For further details see the specificity table.

The DPB1*04:02 allele is not amplified by primer mix 60 in the 9021 (RSH) and 9239 (SHJO) cell lines. For further details see the specificity table.

101.311-24/04 – including *Taq* pol., IFU-01
101.311-24u/04u – without *Taq* pol., IFU-02

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Lot No.: 7F7

Lot-specific information

101.311-24/04 – including *Taq* pol., IFU-01
101.311-24u/04u – without *Taq* pol., IFU-02

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“Instructions for Use” (IFU)

Lot No.: 7F7

Lot-specific information

101.311-24/04 – including *Taq* pol., IFU-01
101.311-24u/04u – without *Taq* pol., IFU-02

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“Instructions for Use” (IFU)

Lot No.: **7F7**

Lot-specific information

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