

Lot No.: **22F**

Lot-specific information

***Olerup* SSP[®] HLA-B*40**

Product number: 101.523-24u/03u – without *Taq* pol.
Lot number: 22F
Expiry date: 2010-November-01
Number of tests: 24 tests – Product No. 101.523-24u
3 tests – Product No. 101.523-03u
Number of wells per test: 72
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. 22F.

CHANGES COMPARED TO THE PREVIOUS *OLERUP* SSP[®] HLA-B*40 Lot

The HLA-B*40 specificity and interpretation tables have been updated for the HLA-B alleles described since the previous *Olerup* SSP[®] HLA-B*40 lot was made (Lot No. Y10).

Twenty-four wells have been added to the HLA-B*40 kit, wells **49 to 72**.

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

Well	5'-primer	3'-primer	rationale
11	-	Exchanged	Exchanged 3'-primer for increased resolution.
18	Removed	Removed	Primer pair moved to well 56. Exchanged positive control primer pair.
23	Removed	Removed	Primer pair moved to well 49.
24	Removed	Removed	Primer pair moved to well 50. Exchanged positive control primer pair.
37	Exchanged	-	Exchanged 5'-primer to improve specificity.
38	Removed	Removed	Primer pair moved to well 54.
39	-	-	Exchanged positive control primer pair.

Lot No.: **22F**

Lot-specific information

41	Removed	Removed	Primer pair moved to well 51.
42	Removed	Removed	Primer pair moved to well 53.
45	Exchanged removed	Exchanged removed	Primer pair moved to well 55. Exchanged 5' and 3'-primers to improve specificity.
46	-	Added	Additional 3'-primer added for increased yield of specific PCR product.
47	Removed	Removed	Primer pair moved to well 52.
49	New	New	Primer pair from well 23.
50	New	New	Primer pair from well 24.
51	New	New	Primer pair from well 41.
52	New	New	New primer pair for the B*4063 and 4092 alleles.
53	New	New	Primer pair from well 42.
54	New	New	Primer pair from well 38.
55	New	New	Primer pair from well 45.
56	New	New	Primer pair from well 18.
57	New	New	New primer pair for the B*4079 allele.
58	New	New	New primer pair for the B*4080 allele.
59	New	New	New primer pair for the B*4081 allele.
60	New	New	New primer pair for the B*4082 and 4088 alleles.
61	New	New	New primer pair for the B*4083 allele.
62	New	New	New primer pair for the B*4084 allele.
63	New	New	New primer pair for the B*4085 allele.
64	New	New	New primer pair for the B*4086 allele.
65	New	New	New primer pair to improve resolution of the B*4072 allele.
66	New	New	New primer pair for the B*407202 allele.
67	New	New	New primer pair for the B*4089 allele.
68	New	New	New primer pair for the B*4090 allele.
69	New	New	New primer pair for the B*4091 allele.
70	New	New	New primer pair to improve resolution of the B*4006 allele.
71	New	New	New primer pair for the B*4075 allele.
72	New	New	New primer pair for the B*4078 allele.

Changes in revision R01 compared to R00:

1. Length of internal positive control band corrected in the Specificity Table for wells 18, 24 and 39.

Changes in revision R02 compared to R01:

1. Primer positions and fragment sizes corrected in the interpretation and primer tables.

Changes in revision R04 compared to R03:

1. The fragment sizes in primer mix 45 have been corrected in the footnotes to the interpretation and specificity tables.

Lot No.: **22F**

Lot-specific information

PRODUCT DESCRIPTION

HLA-B*40 SSP subtyping

CONTENT

The primer set contains 5'- and 3'-primers for identifying the B*4001 to B*4093 alleles.

PLATE LAYOUT

Each test consists of 72 PCR reactions in a 96 well cut PCR plate. Wells 73 to 96 are empty.

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
empty	empty	empty	empty	empty	empty	empty	empty
empty	empty	empty	empty	empty	empty	empty	empty
empty	empty	empty	empty	empty	empty	empty	empty

The 96 well PCR plate is marked with 'HLA-B*40' in silver/gray ink.

Well No. 1 is marked with the Lot No. '22F'.

The PCR plates are covered with a PCR-compatible foil.

Please note: When removing each 96 well PCR plate, make sure that the remaining plates stay covered. Use a scalpel or a similar instrument to carefully cut the foil between the plates.

INTERPRETATION

The interpretation of HLA-B*40 SSP subtypings will be influenced by many other HLA-B alleles when present on the other haplotype. In addition, the Cw*0206 allele will be amplified by primer mix 5, the HLA-Cw*0305, 0325 and 0327 alleles will be amplified by primer mixes 4, 8 and 13, the Cw*0334 allele will be amplified by primer mix 33, the Cw*0738 allele will be amplified by primer mixes 16, 31 and 34, the Cw*0746 allele will be amplified by primer mix 39, the Cw*0808 alleles by primer mixes 6 and 29 and the Cw*17 alleles faintly by primer mix 7.

Lot No.: **22F**

Lot-specific information

UNIQUELY IDENTIFIED ALLELES

All the HLA-B*40 alleles, i.e. **B*4001 to B*4093**, recognized by the HLA Nomenclature Committee in October 2008¹ will give rise to unique amplification patterns by the primers in the HLA-B*40 subtyping kit.

The HLA-B*40 subtyping kit cannot distinguish the B*400101 to B*400105 alleles or the B*400201 to B*400203 alleles or the B*40060101 to B*400602 alleles or the B*401402 and B*401403 alleles.

¹HLA-B alleles listed on the IMGT/HLA web page 2008-October-10, release 2.23.0, www.ebi.ac.uk/imgt/hla.

RESOLUTION IN HOMO- AND HETEROZYGOTES

The 91 phenotypically different HLA-B*40 alleles give rise to 93 amplification patterns, which can be combined in 4 371 homozygous and heterozygous combinations. 539 of these genotypes do not give rise to unique amplification patterns. The different sizes of the PCR products by primer mixes 16, 20, 37, 44, 45, 48, 60 and 65 were not considered in these calculations.

```

+++++--- -++-+--- +-+---+--- -++-+---+ -+----- -+----- -+----- -+-----
      4024,4061 = 4024,4073
+++++--- -++-+--- +-+---+--- -++-+---+ -+-----+ -+----- -+----- -+-----
      4018,4060 = 4024,4060
+++++--- -++-+--- +-----+--- -++-+---+ -+----- -+-----+ -+----- -+-----
      4018,4061 = 4018,4073
+++++--- -++-+--- +-----+--- -++-+---+ -+-----+ -+----- -+----- -+-----
      4009,4052 = 4018,4052
+++++--- -++-+--- +-----+--- -++-+---+ -+----- -+----- -+----- -+-----
      4009,4033 = 4018,4033
+++++--- -++-+--- +-----+--- -++-+---+ -+----- -+-----+ -+----- -+-----
      4027,4061 = 4027,4073
+++++---+ -+-----+ -+-----+--- -++-+---+ -+----- -+-----+ -+----- -+-----
      4005,4061 = 4005,4073
+++++--- -++-+---+ -+-----+--- -++-+---+ -+----- +----- -+----- -+-----
      4008,4047 = 4013,4025
+++++--- -++-+---+ -+-----+--- -++-+---+ -+----- -+-----+ -+----- -+-----
      4009,4061 = 4009,4073
+++++--- -+-----+ -+-----+--- +---+---+--- -+----- -+----- -+----- -+-----
      4019,4043 = 4047,4050
+++++--- -+-----+ -+-----+--- -++-+---+ -+----- -+---+--- -+----- -+-----
      4019,4055 = 4047,4056
+++++--- -+-----+ -+-----+--- -++-+---+ -+----- -+-----+ -+----- -+-----
      4019,4061 = 4019,4073
+++++--- -+-----+ -+-----+--- -++-+---+ -+----- -+----- -+-----+ -+-----
      4019,4088 = 4047,4082
+++++--- -+-----+ -+-----+--- -++-+---+ -+---+--- -+----- -+----- -+-----
      4019,4049 = 4040,4047
+++++--- -+-----+ -+-----+--- -++-+---+ -+----- -+-----+ -+----- -+-----
      4029,4061 = 4029,4073
+++++--- -+-----+ -+-----+--- +---+---+--- -+---+--- -+----- -+----- -+-----
      4040,4043 = 4049,4050
+++++--- -+-----+ -+-----+--- +---+---+--- -+----- -+---+--- -+----- -+-----
      4043,4056 = 4050,4055
+++++--- -+-----+ -+-----+--- +---+---+--- -+----- -+-----+ -+----- -+-----
      4050,4061 = 4050,4073
+++++--- -+-----+ -+-----+--- -++-+---+ -+----- -+----- -+---+--- -+-----
      4037,4043 = 4050,4076

```

Lot No.: **22F**

Lot-specific information

++++-----	-----+	+-----+	+-----+	-----	-----	-----	-----+	+-----
4043,4082	=	4050,4088						
++++-----	-----+	+-----+	+-----+	-----	-----	-----	-----	+-----
4002,4043	=	4043,4050						
++++-----	-----+	+-----+	+-----+	-----	-----+	-----	-----	+-----
4035,4061	=	4035,4073						
++++-----	-----+	+-----+	+-----+	-----	-----+	-----	-----	+-----
4040,4055	=	4049,4056						
++++-----	-----+	+-----+	+-----+	-----	-----	-----	-----+	+-----
4040,4088	=	4049,4082						
++++-----	-----+	+-----+	+-----+	-----	-----+	-----	-----	+-----+
4061,4078	=	4073,4078						
++++-----	-----+	+-----+	+-----+	-----	-----+	-----	-----	+-----
4056,4061	=	4056,4073						
++++-----	-----+	+-----+	+-----+	-----	-----+	-----	-----	+-----
4037,4055	=	4056,4076						
++++-----	-----+	+-----+	+-----+	-----	-----+	-----	-----	+-----
4055,4082	=	4056,4088						
++++-----	-----+	+-----+	+-----+	-----	-----+	-----	-----	+-----
4002,4055	=	4055,4056						
++++-----	-----+	+-----+	+-----+	-----	-----+	-----	-----	+-----
4057,4061	=	4057,4073						
++++-----	-----+	+-----+	+-----+	-----	-----+	-----	-----	+-----
4037,4061	=	4037,4073						
++++-----	-----+	+-----+	+-----+	-----	-----+	-----	-----	+-----
4061,4082	=	4073,4082						
++++-----	-----+	+-----+	+-----+	-----	-----+	-----	-----	+-----
4061,4085	=	4073,4085						
++++-----	-----+	+-----+	+-----+	-----	-----+	-----	-----	+-----
4061,4090	=	4073,4090						
++++-----	-----+	+-----+	+-----+	-----	-----+	-----	-----	+-----
4002,4061	=	4002,4073						
++++-----	-----+	+-----+	+-----+	-----	-----+	-----	-----	+-----
4061,4089	=	4073,4089						
++++-----	-----+	+-----+	+-----+	-----	-----+	-----	-----	+-----
4061,4091	=	4073,4091						
++++-----	-----+	+-----+	+-----+	-----	-----	-----	-----	+-----
4037,4088	=	4076,4082						
++++-----	-----+	+-----+	+-----+	-----	-----	-----	-----	+-----
4002,4076	=	4037,4076						
++++-----	-----+	+-----+	+-----+	-----	-----	-----	-----	+-----
4002,4088	=	4082,4088						
++++-----	-----+	+-----+	+-----+	-----	-----+	-----	-----	+-----
4039,4061	=	4039,4073						
++++-----	-----+	+-----+	+-----+	-----	-----+	-----	-----	+-----
4003,4061	=	4003,4073						
++++-----	-----+	+-----+	+-----+	-----	-----+	-----	-----	+-----
4044,4061	=	4044,4073						
++++-----	-----+	+-----+	+-----+	-----	-----+	-----	-----	+-----
4020,4038	=	4052,4074						
++++-----	-----+	+-----+	+-----+	-----	-----+	-----	-----	+-----
4020,4061	=	4020,4073						
++++-----	-----+	+-----+	+-----+	-----	-----+	-----	-----	+-----
4020,4074	=	4033,4074						
++++-----	-----+	+-----+	+-----+	-----	-----+	-----	-----	+-----
4061,4071	=	4071,4073						
++++-----	-----+	+-----+	+-----+	-----	-----+	-----	-----	+-----
4006,4060	=	4060,4070						
++++-----	-----+	+-----+	+-----+	-----	-----+	-----	-----	+-----
4061,4070	=	4070,4073						
++++-----	-----+	+-----+	+-----+	-----	-----+	-----	-----	+-----
4006,4074	=	4053,4074						

Lot No.: **22F**

Lot-specific information

+++-----	+-----	+-----	---+---+	-----	-----+	-----	-----+	+-----
4061,4086	=	4073,4086						
+++-----	+-----	+-----	---+---+	-----	-----+	-----	-----	+-----
4006,4061	=	4006,4073						
+++-----	-----	+-----	---+---+	-----	-----+	-----	-----	+-----
4026,4061	=	4026,4073						
++++-----	-----	+-----	---+---+	-----	-----+	-----	-----	+-----
400106,4011	=	400106,4026 = 4026,4074						
+++-----	-----	+-----	---+---+	+++-----	-----	-----	-----	+-----
4004,4060	=	4060,4064						
+++-----	-----	+-----	---+---+	+-----	-----+	-----	-----	+-----
4004,4061	=	4004,4073						
+++-----	-----	+-----	---+---+	-----+	-----+	-----	-----	+-----
4028,4061	=	4028,4073						
++++-----	-----	+-----	---+---+	+-----	-----+	-----	-----	+-----
4061,4064	=	4064,4073						
+++-----	-----	+-----	---+---+	-----	-----+	-----	-----	+-----
4011,4061	=	4011,4073						
+++-----	-----	+-----	---+---+	-----	-----+	-----	-----	-----
4061,4074	=	4073,4074						
+++-----	-----	+-----	---+---+	-----	-----+	-----	-----	-----
4063,4074	=	4074,4092						
++-+-	-----	+-----	---+---+	-----	-----+	-----	-----	+-+-----
4032,4061	=	4032,4073						
++-+-	-----	+-----	---+---+	-----	-----+	-----	-----	+-+-----
4031,4061	=	4031,4073						
++-+-	-----	+-----	---+---+	-----	-----	-----	-----	+-+-----
4031,4063	=	4031,4092						
++-+-	-----	+-----	---+---+	-----	-----+	-----	-----	+-+-----
4015,4061	=	4015,4073						
++-+-	-----	+-----	---+---+	-----	-----+	-----	-----	+-+-----
4016,4061	=	4016,4073						
++-+-	-----	+-----	---+---+	-----	-----+	-----	-----	+-+-----
4061,4080	=	4073,4080						
++-+-	-----	+-----	---+---+	-----	-----+	-----	-----	-----
4045,4061	=	4045,4073						
++-+-	-----	+-----	---+---+	-----	-----	-----	-----	+-+-----
4063,4080	=	4080,4092						
++-+-	-----	+-----	---+---+	-----	-----	-----	-----	+-+-----
4045,4063	=	4045,4092						
++-+-	-----	+-----	---+---+	-----+	-----+	-----	-----	-----+
4059,4061	=	4059,4073						
++-+-	-----	+-----	---+---+	-----+	-----	-----	-----	-----+
4036,4059	=	4048,4059						
++-+-	-----	+-----	---+---+	-----+	-----	-----	-----	-----+
4042,4059	=	4059,4060						
++-+-	-----	+-----	---+---+	-----+	-----	-----	-----	-----+
4059,4063	=	4059,4092						
++-+-	-----	+-----	---+---+	-----+	-----	-----	-----	-----+
4033,4059	=	4052,4059						
++-+-	-----	+-----	---+---+	-----+	-----	-----	-----	-----+
4033,4060	=	4052,4060						
++-+-	-----	+-----	---+---+	-----+	-----	-----	-----	-----+
4052,4061	=	4052,4073						
++-+-	-----	+-----	---+---+	-----+	-----	-----	-----	-----+
4036,4052	=	4048,4052						
++-+-	-----	+-----	---+---+	-----+	-----	-----	-----	-----+
4033,4038	=	4038,4052						
++-+-	-----	+-----	---+---+	-----	-----+	-----	-----	-----+
4033,4061	=	4033,4073						
++-+-	-----	+-----	---+---+	-----+	-----	-----	-----	-----+
4052,4063	=	4052,4092						

Lot-specific information

December 2009
Rev. No.: 04u



Lot No.: **22F**

Lot-specific information

++-----	-----	+--+-----	---+--+++	-+-----+	-----	-----	-----	-----+--
4042,4060	=	4060,4060						
++-----	-----	+--+-----	-+--+--+	-----	-----+	-----	-----	+-----
4023,4061	=	4023,4073						
++-----	-----	+--+-----	-+--+--+	-----	-----	-----	-----	+-----
4014,4023	=	4023,407202						
++-----	-----	+--+-----	---+--+++	-----	-----+	-----	-----	++-----
4014,4061	=	4014,4073						
++-----	-----	+--+-----	---+--+++	-----	-----	---+-----	-----	++-----
4014,4063	=	4014,4092						
++-----	-----	+--+-----	---+--+++	-----	-----	---+-----	-----	-----
4021,4063	=	4021,4092						
++-----	-----	+-----+	---+--+++	+-----	---+-----+	-----	-----	-----
4034,4061	=	4034,4073						
++-----	-----	+-----+	---+--+++	+-----	---+-----	---+-----	-----	-----
4034,4063	=	4034,4092						
++-----	-----	+-----	---+--+++	-----	-----+	-----	-----	-----
4043,4061	=	4043,4073						
++-----	-----	+-----	---+--+++	-----	-----	---+-----	-----	-----
4043,4063	=	4043,4092						
++-----	-----	+-----	---+--+++	-----	-----+	-----	-----	-----
4022N,4061	=	4022N,4073						
++-----	-----	+-----	---+--+++	-----	-----	---+-----	-----	-----
4022N,4063	=	4022N,4092						
++-----	-----	+-----	---+--+++	-----+	-----+	-----	-----	-----
4038,4061	=	4038,4073						
++-----	-----	+-----	---+--+++	-----+	-----	+-----	-----	-----
4036,4038	=	4038,4048						
++-----	-----	+-----	---+--+++	-----+	-----	---+-----	-----	-----
4038,4063	=	4038,4092						
++-----	-----	+-----	---+--+++	-----	-----+	+-----	-----	-----
4048,4061	=	4048,4073						
++-----	-----	+-----	---+--+++	-----	-----	+--+-----	-----	-----
4048,4063	=	4048,4092						
++-----	-----	+-----	---+--+++	-----	-----	+-----	-----	-----
4036,4048	=	4048,4048						
++-----	-----	+-----	---+--+++	+-----	---+-----+	-----	-----	-----
4030,4061	=	4030,4073						
++-----	-----	+-----	---+--+++	+-----	---+-----	---+-----	-----	-----
4030,4063	=	4030,4092						
++-----	-----	+-----	---+--+++	+-----	-----+	-----	-----	-----+
4042,4061	=	4042,4073						
++-----	-----	+-----	---+--+++	---+-----	-----	---+-----	-----	-----
4049,4063	=	4049,4092						
++-----	-----	+-----	---+--+++	-----+	-----+	-----	-----	-----
4051,4061	=	4051,4073						
++-----	-----	+-----	---+--+++	-----	---+-----+	-----	-----	-----
4054,4061	=	4054,4073						
++-----	-----	+-----	---+--+++	-----	---+-----	---+-----	-----	-----
4054,4063	=	4054,4092						
++-----	-----	+-----	---+--+++	-----	---+-----+	-----	-----	-----
4055,4061	=	4055,4073						
++-----	-----	+-----	---+--+++	-----	---+-----	---+-----	-----	-----
4055,4063	=	4055,4092						
++-----	-----	+-----	---+--+++	-----	-----+	+-----	-----	-----
4036,4061	=	4036,4073						
++-----	-----	+-----	---+--+++	-----	-----+	+-----	-----	-----
4061,4076	=	4073,4076						
++-----	-----	+-----	---+--+++	-----	-----+	---+-----	-----	-----
4061,4062	=	4062,4073						
++-----	-----	+-----	---+--+++	-----	-----+	---+-----	-----	-----
4061,4063	=	4061,4092 = 4063,4073 = 4073,4092						

Lot-specific information

December 2009
Rev. No.: 04u



Lot No.: **22F**

Lot-specific information

-++++--	-----	+--+--	---+--	+-----	---+--	-----	-----	-----+--
	4009,4059	=	4018,4059	=	4024,4059			
-++++--	-----	+--+--	---+--	+-----	---+--	-----	-----	-----+--
	4009,4031	=	4018,4031					
-++++--	-----	+--+--	---+--	+-----	---+--	-----	-----	+-----+--
	4004,4018	=	4004,4024	=	4024,4064			
-++++--	-----	+--+--	---+--	+-----	---+--	-----	-----	+-----+--
	4018,4028	=	4024,4028					
-++++--	-----	+--+--	---+--	+-----	---+--	-----	-----	-----+--
	4009,4024	=	4018,4024	=	4024,4024			
-++++--	-----	+--+--	---+--	+-----	---+--	-----	-----	+-----+--
	4002,4032	=	4016,4018					
-++++--	-----	+--+--	---+--	+-----	---+--	-----	-----	+-----+--
	4009,4032	=	4018,4032					
-++++--	-----	+--+--	---+--	+-----	---+--	-----	-----	-----+--
	4009,4020	=	4018,4020					
-++++--	-----	+--+--	---+--	+-----	---+--	-----	-----	-----+--
	4009,4018	=	4018,4018					
-++++--	-----	+--+--	---+--	+-----	---+--	-----	-----	+-----+--
	4006,4027	=	4027,4053					
-++++--	-----	+--+--	---+--	+-----	---+--	-----	-----	+-----+--
	4002,4027	=	4027,4027					
-++++--	-----	+--+--	---+--	+-----	---+--	-----	-----	+-----+--
	4005,4006	=	4005,4053					
-++++--	-----	+--+--	---+--	+-----	---+--	-----	-----	+-----+--
	4002,4071	=	4005,4035	=	4035,4071			
-++++--	-----	+--+--	---+--	+-----	---+--	-----	-----	+-----+--
	4006,4008	=	4008,4053					
-++++--	-----	+--+--	---+--	+-----	---+--	-----	-----	+-----+--
	4006,4013	=	4013,4053					
-++++--	-----	+--+--	---+--	+-----	---+--	-----	-----	+-----+--
	4006,4009	=	4009,4053					
-++++--	-----	+--+--	---+--	+-----	---+--	-----	-----	+-----+--
	4006,4019	=	4019,4053					
-++++--	-----	+--+--	---+--	+-----	---+--	-----	-----	+-----+--
	4006,4029	=	4029,4053					
-++++--	-----	+--+--	---+--	+-----	---+--	-----	-----	+-----+--
	4006,4050	=	4050,4053					
-++++--	-----	+--+--	---+--	+-----	---+--	-----	-----	+-----+--
	4006,4035	=	4035,4053					
-++++--	-----	+--+--	---+--	+-----	---+--	-----	-----	+-----+--
	4006,4040	=	4040,4053					
-++++--	-----	+--+--	---+--	+-----	---+--	-----	-----	+-----+--
	4006,4078	=	4053,4078					
-++++--	-----	+--+--	---+--	+-----	---+--	-----	-----	+-----+--
	4006,4056	=	4053,4056					
-++++--	-----	+--+--	---+--	+-----	---+--	-----	-----	+-----+--
	4006,4057	=	4053,4057					
-++++--	-----	+--+--	---+--	+-----	---+--	-----	-----	+-----+--
	4006,4037	=	4037,4053					
-++++--	-----	+--+--	---+--	+-----	---+--	-----	-----	+-----+--
	4006,4082	=	4053,4082					
-++++--	-----	+--+--	---+--	+-----	---+--	-----	-----	+-----+--
	4006,4085	=	4053,4085					
-++++--	-----	+--+--	---+--	+-----	---+--	-----	-----	+-----+--
	4006,4089	=	4053,4089					
-++++--	-----	+--+--	---+--	+-----	---+--	-----	-----	+-----+--
	4006,4090	=	4053,4090					
-++++--	-----	+--+--	---+--	+-----	---+--	-----	-----	+-----+--
	4006,4091	=	4053,4091					
-++++--	-----	+--+--	---+--	+-----	---+--	-----	-----	+-----+--
	4002,4006	=	4002,4053					

Lot No.: **22F**

Lot-specific information

-++-+--	+-----	-----	-----++-	-----	-----	-----	-----	+-----
	4006,4039	=	4039,4053					
-++-+--	-++-+--	-++-+--	-----++-	+-----	+-----	-----	-----	+-----
	4002,4068	=	4004,4008					
-++-+--	-----	-----++-	-----++-	-----	-----	-----	-----	+-----
	4002,4029	=	4029,4029					
-++-+--	-----	-----++-	-----++-	-----	-----	-----	-----	+-----
	4002,4050	=	4050,4050					
-++-+--	-----	-----++-	-----++-	-++-+--	-----	-----	-----	+-----
	4002,4035	=	4035,4035					
-++-+--	-----	-----++-	-----++-	-----	-----++-	-----	-----	+-----+
	4002,4078	=	4078,4078					
-++-+--	-----	-----++-	-----++-	-----	-----++-	-----	-----	+-----
	4002,4056	=	4056,4056					
-++-+--	-----	-----++-	-----++-	-----	-----++-	-----	-----	+-----
	4002,4057	=	4057,4057					
-++-+--	-----	-----++-	-----++-	-----	-----	-----++-	-----	+-----
	4002,4037	=	4037,4037					
-++-+--	-----	-----++-	-----++-	-----	-----	-----	-----++-	+-----
	4002,4082	=	4082,4082					
-++-+--	-----	-----++-	-----++-	-----	-----	-----	-----	+-----++-
	4002,4090	=	4090,4090					
-++-+--	-----++-	-----++-	-----++-	-----	-----	-----	-----	+-----++-
	4003,4006	=	4003,4053					
-++-+--	-----	-----++-	-----++-	-----++-	-----++-	-----	-----	+-----++-
	4006,4059	=	4059,4070					
-++-+--	-----	-----++-	-----++-	-----	-----++-	-----	-----	+-----++-
	4006,4020	=	4011,4044 = 4020,4053					
-++-+--	-----	-----++-	-----++-	-----	-----	-----	-----	+-----++-
	4006,4044	=	4044,4053					
-++-+--	-----	-----++-	-----++-	-----++-	-----++-	-----	-----	+-----++-
	4004,4059	=	4059,4064					
-++-+--	-----++-	-----++-	-----++-	-----++-	-----	-----	-----	+-----
	4006,4071	=	4053,4071					
-++-+--	-----++-	-----++-	-----++-	-----++-	-----++-	-----	-----	+-----
	4006,4068	=	4053,4068 = 4068,4070					
-++-+--	-----	-----++-	-----++-	-----	-----++-	-----	-----	+-----
	4006,4026	=	4026,4053					
-++-+--	-----	-----++-	-----++-	-----++-	-----	-----	-----	+-----
	4004,4006	=	4004,4053 = 4004,4070 = 4064,4070					
-++-+--	-----	-----++-	-----++-	-----++-	-----++-	-----	-----	+-----
	4006,4028	=	4028,4053 = 4028,4070					
-++-+--	-----	-----++-	-----++-	-----	-----	-----	-----	+-----
	4006,4070	=	4053,4070 = 4070,4070					
-++-+--	-----	-----++-	-----++-	-----++-	-----	-----	-----	+-----
	4006,4064	=	4053,4064					
-++-+--	-----	-----++-	-----++-	-----	-----++-	-----	-----	+-----
	4006,4011	=	4011,4053					
-++-+--	-----	-----++-	-----++-	-----	-----	-----	-----++-	+-----
	4006,4086	=	4053,4086 = 4086,4086					
-++-+--	-----	-----++-	-----++-	-----	-----	-----	-----	+-----++-
	4006,4075	=	4053,4075					
-++-+--	-----	-----++-	-----++-	-----	-----	-----	-----	+-----
	4006,4006	=	4006,4053					
-++-+--	-----	-----++-	-----++-	-----++-	-----++-	-----	-----	+-----
	4004,4068	=	4064,4068					
-++-+--	-----	-----++-	-----++-	-----++-	-----++-	-----	-----	+-----
	4004,4028	=	4028,4064					
-++-+--	-----	-----++-	-----++-	-----++-	-----	-----	-----	+-----
	4004,4004	=	4004,4064					
-++-+--	-----++-	-----++-	-----++-	-----	-----	-----	-----	+-----++-
	401401,4032	=	4032,407201					

Lot No.: **22F**

Lot-specific information

```

-+---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+
    401401,4031 = 4031,407201
-+---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+
    4014,4032 = 4032,407202
-+---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+
    4014,4031 = 4031,407202
-+---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+
    4031,4045 = 4031,4080
-+---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+
    4015,4077 = 4016,4077
-+---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+
    401401,4015 = 401401,4016 = 4014,4015 = 4015,407201 = 4015,407202 =
4016,407201
-+---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+
    401401,4080 = 407201,4080
-+---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+
    401401,4045 = 4045,407201
-+---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+
    4015,4015 = 4015,4016
-+---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+
    4014,4016 = 4016,407202
-+---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+
    4014,4080 = 407202,4080
-+---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+
    4014,4045 = 4045,407202
-+---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+
    4045,4080 = 4080,4080
-+---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+
    4053,4093 = 4093,4093
-+---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+
    4053,4083 = 4083,4083
-+---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+
    401401,4077 = 4014,4077
-+---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+
    407201,4077 = 407202,4077 = 4077,4077
-+---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+
    401401,401401 = 401401,4014 = 401401,407201 = 401401,407202 = 4014,407201
-+---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+
    407201,407201 = 407201,407202
-+---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+
    4014,4014 = 4014,407202
-+---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+ +---+---+
    4030,4034 = 4034,4034

```

4001 = 400101-400105
 4002 = 400201-400203
 4006 = 40060101-400602
 4014 = 401402 and 401403)

Lot No.: **22F**

Lot-specific information

SPECIFICITY TABLE

HLA-B*40 SSP subtyping

Specificities and sizes of the PCR products of the 72 primer mixes used for HLA-B*40 SSP subtyping

Primer Mix	Size of spec. PCR product ¹	Size of control band ²	Amplified HLA-B*40 alleles ³	Other amplified HLA class I alleles ⁴
1	175 bp	800 bp	400101-400106, 4007, 4010, 4012, 4021-4023, 4025, 4033, 4036, 4038, 4042, 4043, 4046-4049, 4051, 4052, 4054, 4055, 4060-4063, 4065-4067, 4069, 4073, 4074, 4076, 4079, 4081, 4084, 4087, 4088, 4092	9516, 9524, 4431, 4606, 480301-480302
2	215 bp	1070 bp	400101-400602, 4009, 4011, 401401-4016, 4018-4020, 4022N-4039, 4042-4048, 4050-4057, 4059, 4060, 4062-4067, 4069-4074, 4076-4093	1323, 1571, 180101-1803, 1805, 1806, 1808-1815, 1817N-1824, 1826-1828, 1830-1832, 2718, 2729, 3563, 370101-3714, 4101-4108, 4415, 4418, 4455, 4501-4505, 4507-4509, 490101-4905, 5001, 5002, 5004
3⁵	130 bp	1070 bp	400201-400602, 4008, 4009, 4011, 4013, 4018-4020, 4024, 4026-4029, 4035, 4037, 4039, 4040, 4044,	

Lot No.: **22F**

Lot-specific information

			4050, 4056, 4057, 4064, 4068, 4070, 4071, 4074, 4075, 4078, 4082, 4085, 4086, 4089-4091	
4⁵	95 bp	800 bp	400201-400203, 4005, 4008, 4009, 4013, 4015, 4016, 4018, 4019, 4024, 4027, 4029, 4031, 4032, 4035, 4037, 4039, 4040, 4045, 4050, 4056- 4058, 4078, 4080, 4082, 4085, 4089-4091	070201-0706, 0708, 0710, 0713, 0715, 0716, 0719-0768, 080101-0808N, 0810, 0811, 0813-0815, 0817-0827, 0829- 0834, 0836, 0838, 1545, 2707, 2711, 2724, 2732-2734, 2743, 3522, 3531, 3587, 3707, 3709, 3914, 3929, 4102, 4104, 4201, 4202, 420501-420502, 4207, 4208, 4454, 480101-480102, 4804-4806, 4808-4813, 4815, 4816, 4818, 4819, 5504, 8101- 8104N, Cw*0305, Cw*0325, Cw*0327
5	190 bp	800 bp	4003, 4018, 4020, 4024, 4031-4033, 4044, 4052, 4059	070201-0704, 0707-0713, 0715, 0716, 071801-071802, 0721-0723, 0725-0727, 0729, 0730, 0733, 0735-0739, 0741, 0742, 0744-0752, 0754-0759, 0761-0763, 0765-0768, 1540, 1547, 1549, 1552, 9514, 9517, 9524, 9538, 1810, 1821, 2734, 2741, 3515, 3533, 3566, 3586, 3707, 4606, 4808, 5713, Cw*0206
6⁵	95 bp	1070 bp	4003, 4027	0709, 0711, 0717, 0828, 0835, 0837, 1405, 1507, 1555, 1568, 9526, 1814, 3505, 3551, 3558, 3566, 3572, 3589, 3903, 3924, 3937, 4206, 4209, 4612, 4807, 4814, 5314, 5818, Cw*0808
7^{5,7}	105 bp	800 bp	4012, 4046, 4093	0727, 0750, 0804, 0817, 1503, 1547, 1554, 1561, 1562, 1564, 1568, 1569, 1591, 1598, 9503, 9523, 9527, 9531, 9532, 9551, 2718, 2729, 3803, 390201- 390202, 3908, 391301-391302, 3923, 3939, 4440, 4444, 480101-4805, 4807-4819, 5518
8	235 bp	1070 bp	4005, 4071	0720, 0724, 0760, 0821, 0825,

Lot No.: **22F**

Lot-specific information

				1507, 1545, 1555, 1568, 9526, 3505, 3516, 3517, 3522, 3530, 3551, 3558, 3572, 3589, 4454, 4612, 5314, 5818, Cw*0305, Cw*0325, Cw*0327
9	160 bp	1070 bp	40060101-400602, 4044, 4053, 4070, 4075, 4083, 4086, 4093	2714, 510109, 5110, 512402, 5411, 7301
10	215 bp	1070 bp	4007, 4008, 4013, 4068	1807, 1829, 2723, 3550, 3584
11⁵	85 bp	1070 bp	4077, 4087	9524, 4814, 5805 ^{weakly}
12⁵	95 bp	1070 bp	4008, 4025, 4068	9543, 3519, 3547, 4412
13⁵	90 bp	1070 bp	4003, 4009, 4018, 4024, 4031, 4032	070201-0704, 0708-0711, 0713, 0715-0717, 0719-0731, 0733, 0735-0739, 0741-0752, 0754-0768, 0807, 0828, 0837, 1507, 1545, 1555, 1568, 1814, 1822, 2734, 3505, 3516, 3517, 3530, 3551, 3558, 3566, 3572, 3589, 3707, 3709, 3929, 4104, 4209, 4454, 4612, 4808, 5314, 5818, Cw*0305, Cw*0325, Cw*0327
14⁵	90 bp	800 bp	4010	1546, 9506, 3547
15	150 bp	800 bp	4013, 4019, 4047	3706, 44020101-4405, 4407, 4410-4439, 4441-4443, 4445, 4447-4456N, 4458N, 4459, 4461N-446402, 47010101-47010102, 4703-4705, 490101-4902, 4904, 4905
16^{5,10}	75, 160 bp	800 bp	401401, 4015, 407201, 4077	3566, 420501-420502, 4812, Cw*0738
17^{5,6}	120 bp	800 bp	400101-400106, 4007, 4010, 4012, 401401-401403, 4021, 4022N, 4025, 4030, 4031, 4033, 4034, 4036, 4038, 4042, 4043, 4045-4049, 4052, 4054, 4055, 4059-	0725, 0748, 2736, 3566, 4108, 420501-420502, 4431, 4606, 480101-480102, 480301-480302, 4806, 4807, 4809-4812, 4814, 4816-4819, 8101-8104N

Lot No.: **22F**

Lot-specific information

			4063, 4065, 4066, 4069, 407201-4074, 4076, 4077, 4079-4081, 4084, 4087, 4088	
18⁵	105 bp	800 bp	400106, 4026	070503 ^{weakly} , 150102, 1509, 5106, 5159
19	310 bp	1070 bp	4004, 4024, 4028, 4059, 4060, 4068, 4070	0712, 1301-1304, 1306-1309, 1311-1320, 1322, 1323, 1516, 1520, 1534, 1542, 1562, 1567, 1585, 1586, 1595, 9537, 1822, 2714, 350101-3511, 3513-3515, 3518-3521, 3523-3530, 3533- 3538, 3540N-3542, 3545-3550, 3552-3558, 3560, 3562-3566, 356801-3572, 3574-3578, 3580- 3585, 3588-3594, 4104, 4107, 4410, 4415, 4418, 4448, 4501- 4509, 4611, 4618, 4802, 4817, 490101-4905, 5001, 5002, 5115, 5156, 530101-5306, 5308-5316, 5401-5405N, 5407, 5408N, 5410-5417, 550101-5503, 5505, 5507, 5509-5513, 5515, 5516, 5518-5534, 5601, 5602, 5607- 5611, 5613-5617, 5619N, 5620, 5622-5624, 5705, 580101-5802, 5804-5807, 5809-5819, 5901- 5903, 8201, 8202
20^{5,11}	135, 285 bp	1070 bp	401401-4016, 4023, 4031, 4032, 4045, 4080	070201-071802, 0720-0732, 0734-0739, 0741-0752, 0754- 0759, 0761-0768, 9538, 3510, 3566, 3707, 3907, 4108, 420501-420502, 480101- 480102, 4805-4812, 4814-4816, 4818, 4819, 8101-8104N
21^{5,6}	145 bp	800 bp	4021	1309, 15010101-150104, 150106-1502, 1504-1508, 151101-1512, 1514, 1515, 1519- 1521, 1525-1528, 1530-1535, 1538-1540, 1542, 1544, 1545, 1548, 1550, 1555-1558, 1560, 1563, 1565, 1566, 1570, 1571, 1573, 1575-1579N, 1581-1586, 1588, 1592, 1594N, 1596, 1597, 9501, 9502, 9504, 9505, 9507,

Lot No.: **22F**

Lot-specific information

				9509- 9513, 9516-9518, 9520-9522, 9525, 9526, 9528, 9529, 9535-9542, 9544-9550, , 3546, 460101-4603, 4605-4618, 5712
22	235 bp	800 bp	400201-4003, 4008, 4009, 4013, 4015, 4016, 4018, 4019, 4024, 4027, 4029, 4031, 4032, 4035, 4037, 4040, 4045, 4050, 4056-4058, 4078, 4080, 4082, 4085, 4089-4091	070201-0706, 0708-0711, 0713, 0715-0717, 0721-0723, 0725-0730, 0732, 0733, 0735-0742, 0744-0759, 0761-0763, 0765-0768, 2707, 2711, 2724, 2732-2734, 2743, 3531, 3566, 3707, 480101-480102, 4804-4816, 4818, 4819, 8101-8104N
23⁵	95 bp	800 bp	4029	
24	165 bp	1070 bp	4034	
25⁵	125 bp	1070 bp	4043, 4050	4506
26⁵	120 bp	1070 bp	4015, 4016, 4023, 4032	070201-071802, 0720-0724, 0726-0732, 0734-0739, 0741-0747, 0749N, 0750, 0752, 0754-0759, 0761-0768, 9538, 3707, 4805, 4808, 4815
27	180 bp	800 bp	4022N	
28	325 bp	1070 bp	400101-400106, 4004, 4007, 4010-4012, 401401-401403, 4020-4023, 4025, 4026, 4028, 4033, 4036, 4038, 4042, 4043, 4046-4049, 4051, 4052, 4054, 4055, 4059-4069, 407201-4074, 4076, 4077, 4079, 4081, 4084, 4087, 4088, 4092	0707, 0712, 0714, 071801-071802, 0812, 0816, 1301, 1306, 1307N, 1310-1313, 1317, 1320-1323, 1401-1404, 140601-1409, 15010101-150104, 150106-1503, 1505, 1506, 1508-1515, 15170101-1521, 1523-1540, 1543, 1544, 1546-1554, 1556-1558, 1560-1566, 1569-1582, 1584-1594N, 1596-1599, 9501-9511N, 9513-9517, 9519-9525, 9527, 9528, 9531-9536, 9538-9540, 9542-9551, 180101-180103, 1803-1813, 1815, 1817N-1821, 1823N-1826, 1828-1832, 2719, 2721, 2730, 350101-350403, 3506-3515, 3518-3521, 3523-3529, 3532-3536, 3538-3550, 3552-3557, 3559, 3561-3565Q, 3567-3571, 3574-3586, 3588, 3590-3594,

Lot No.: **22F**

Lot-specific information

				370101-370104, 3703N-3706, 3708, 3710-3714, 380101-3817, 39010101-39010102L, 390103-390202, 3904, 3905, 3907-391302, 3915, 3917-3920, 3922, 3923, 3925N-3928, 3930-3932, 3935, 3936, 3938Q-3945, 410301-410302, 4108, 44020101-4414, 4416, 4417, 4419N, 4421-4446, 4448-4453, 4455-446402, 460101-4610, 4613-4617, 47010101-4703, 4802-480302, 4817, 5104, 5106, 5142, 5145, 5156, 5159, 5162, 530101-5313, 5315, 5316, 5406, 5409, 5508, 5602-5604, 5609-5612, 5618, 5705, 5711, 580101-5802, 5804-5807, 5809-5813, 5815-5817N, 5819, 5820, 670101-6702, 8201, 8202, 8301
29	235 bp	800 bp	4039	0719, 0731, 0734, 0743, 080101-0808N, 0810, 0813-0815, 0817-0820, 0822-0824, 0826-0838, 1405, 1814, 3587, 3709, 3903, 3914, 3924, 3929, 3937, 4102, 4104, 4201, 4202, 420501-4209, 5504, Cw*0808
30	190 bp	1070 bp	400101-400203, 4004, 40060101-4008, 4010-4016, 4019, 4021-4023, 4025, 4027, 4029, 4030, 4034-4038, 4040, 4043, 4045-4050, 4053-4058, 4061, 4062, 4064-4070, 407201-4088, 4090, 4091, 4093	070501-0706, 0732, 0740, 0753, 1301-130204, 1307N-1309, 1311, 1313-1323, 2707, 2711, 2720, 2724, 2727, 2733, 2743, 3531, 3588, 4431, 480101-480102, 480301-4807, 4809-4816, 4818, 4819, 5110, 5116, 5131, 5134, 5208, 5509, 5522, 5524, 8101-8104N
31⁶	225 bp	1070 bp	4038, 4048, 4052, 4059, 4060	0709, 0711, 0717, 9538, 3566, 4606, 4814, Cw*0738
32	255 bp	1070 bp	400101-4009,	1571, 180101-1803, 1805-1808,

Lot No.: **22F**

Lot-specific information

			4011, 401401-4016, 4018, 4020, 4022N-4039, 4042-4046, 4048, 4050-4057, 4059-4075, 4077-4093	1810-1815, 1817N-1824, 1826-1832, 2708, 2712, 2718, 2726, 2733, 2740, 2742, 3550, 3563, 3584, 3705, 3711, 3931, 4101-4104, 4106-4108, 4202, 4209, 4501-4509, 4614, 5001, 5002, 5004, 5402, 5516, 7301
33	245 bp	1070 bp	4004, 4030, 4034, 4059, 4064, 4068	0712, 0714, 071801-071802, 1301, 1307N, 1313, 1317, 1320-1323, 2719, 2730, 3515, 3533, 3588, 4416, 4421, 446401-446402, 4817, 5713, Cw*0334
34	235 bp	1070 bp	4042, 4060	0714, 0717, 0728, 2736, 4817, Cw*0738
35^{5,8}	140 bp	800 bp	4035, 4071	0768, 1405, 1507, 1545, 1555, 1568, 9526, 1814, 2732, 3505, 3522, 3551, 3558, 3566, 3572, 3589, 3903, 3914, 3924, 3929, 3937, 4454, 4612, 4812, 4814, 5314, 5818
36⁵	135 bp	1070 bp	4010, 4040, 4049, 4058	1546, 1553, 9506, 3547, 44020101-4405, 4409-4414, 4416, 4417, 4419N-4439, 4441-4443, 4445-4448, 4450-4454, 4456N, 4458N, 4459, 4462-446402, 47010101-4705
37^{5,12}	125, 270 bp	1070 bp	4028, 4051	1822, 3521, 3524, 3581, 3704, 5104, 5146, 5156, 5302, 5306, 5714, 5809
38⁵	120 bp	1070 bp	4028	350402, 4462, 5104, 5146, 5156
39	330 bp	800 bp	4012	1503, 1509, 1510, 1518, 1523, 1529, 1537, 1546, 1547, 1549, 1551-1554, 1561, 1562, 1564, 1569, 1572, 1574, 1580, 1590, 1591, 1593, 1598, 1599, 9503, 9506, 9508, 9514, 9515, 9519, 9523, 9524, 9527, 9531-9534, 9543, 9551, Cw*0746
40⁵	120 bp	1070 bp	4038, 4052, 4059, 4060	9516, 9524, 4606
41	205 bp	1070 bp	4008, 4025, 4068	180101-1803, 1805-1811, 1813-1815, 1817N-1824, 1826-1832,

Lot No.: **22F**

Lot-specific information

				2723, 3550, 3584, 3708, 3931, 4202 ^{weakly} , 4209 ^{weakly} , 5402 ^{weakly} , 5516 ^{weakly} , 7301 ^{weakly}
42⁵	95 bp	1070 bp	4058	4434
43	185 bp	1070 bp	4030, 4034, 4059	4817
44^{5,13}	110, 205 bp	800 bp	4054, 4078	
45¹⁴	175, 235 bp	1070 bp	4055, 4056	
46⁹	545 bp	1070 bp	4011, 4020, 4026, 4074	1571, 180101-180103, 1803, 1805-1807, 1809-1813, 1815, 1817N, 1819-1821, 1823N, 1824, 1826, 1828-1832, 2719, 2721, 2730, 3712, 3931
47⁵	145 bp	800 bp	4057	0720, 0724
48¹⁵	215, 245 bp	1070 bp	4061, 4073	1806, 4614
49⁵	120 bp	1070 bp	4036, 4048	4807
50	250 bp	1070 bp	4037, 4076	2742, 3705
51	195 bp	1070 bp	4062	
52⁵	90 bp	1070 bp	4063, 4092	9516
53	165 bp	1070 bp	4065	
54⁵	130 bp	800 bp	4066	
55⁵	125 bp	800 bp	4067	
56⁵	100 bp	1070 bp	4069	
57	380 bp	1070 bp	4079	0723
58	190 bp	1070 bp	4031, 4080	480101-480102, 4804, 4806, 4807, 4809, 4811, 4814-4816, 4818, 4819, 8101-8104N
59	190 bp	1070 bp	4081	
60^{5,16}	135, 250 bp	800 bp	4082, 4088	
61⁵	80 bp	1070 bp	4083	1546, 9506, 9543, 3519, 3547
62	195 bp	800 bp	4084	
63	180 bp	1070 bp	4085	
64⁵	105 bp	1070 bp	4086	9537, 390601-390602, 3933, 3934, 4502, 511301-511302, 5214, 5513, 5622, 5903, 7301,
65^{5,17}	130, 170 bp	1070 bp	400201-400203, 4004-400602, 4008, 4011, 4013-4016, 4019, 4023, 4026-4029,	070501-0706, 0732, 0734, 0740, 0753, 080101-0806, 0808N- 0813, 0815-0827, 0829-0836, 0838, 1303, 1318, 1322, 1509, 1530, 1542, 1548, 1558, 1573, 1583, 1586, 9550, 1826, 2707,

Lot No.: **22F**

Lot-specific information

			4035, 4037, 4039, 4040, 4050, 4053, 4056-4058, 4064, 4068, 4070-407202, 4075, 4077, 4078, 4082, 4083, 4086, 4090, 4091, 4093	2711, 2720, 2727, 2733, 2743, 350201-350203, 350401- 350403, 3506, 350901-350902, 3512, 3518, 3522, 3531, 3544, 3559, 3560, 3581, 3583, 3587, 3588, 3712, 380101, 380201- 3817, 39010101-39010102L, 390103-390602, 3908-3914, 3916, 3918-3920, 3922, 3924, 3926-3928, 3930-3942, 3945, 4101-410302, 4105-4108, 4201, 4202, 4204-4208, 4410, 4414, 4462, 4611, 4618, 4805, 4810, 4812-4814, 4819, 510101- 510202, 510204-5116, 5119- 512402, 5126, 5128-5136, 5138- 5141N, 5143, 5144N, 5146, 5148-5162, 520101-5211, 5213, 5214, 5401-5405N, 5407, 5408N, 5410, 5412, 5413, 5417, 550101-5505, 5507-5513, 5515- 5522, 5524-5526, 5528-5534, 5601, 5602, 5604-5608, 5610, 5612-5617, 5619N-5624, 5702- 570302, 5707, 5709, 5712, 5717, 5808, 5820, 5901-5903, 670101-6702, 7801-7806, 8201, 8202
66⁵	145 bp	1070 bp	401401-4016, 4032, 407201- 407202, 4077	070201-071802, 0720-0732, 0734-0739, 0741-0752, 0754- 0759, 0761-0768, 9538, 3566, 3707, 4108, 420501-420502, 4805, 4808, 4810, 4812, 4814, Cw*0738
67^{5,6}	85 bp	1070 bp	4089	
68	225 bp	1070 bp	4090	
69⁵	70 bp	1070 bp	4091	1321
70	500 bp	1070 bp	4003, 4009, 4018, 4020, 4024, 4031- 4033, 4042, 4044, 4052, 4059, 4060	1304, 1310, 1546, 1553, 9506, 3546, 3547, 3563, 4104, 44020101-4405, 4409, 4411- 4413, 4416, 4417, 4419N-4430, 4432-4456N, 4458N-4461N, 4463-446402, 4509, 4904, 4905
71⁵	120 bp	800 bp	4075	3812
72⁶	155 bp	1070 bp	4078	

Lot No.: 22F

Lot-specific information

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 HLA-B*40 SSP typings.

When the primers in a primer mix can give rise to specific PCR products of more than one length this is indicated if the size difference is 20 base pairs or more. Size differences shorter than 20 base pairs are not given. For high resolution SSP kits the respective lengths of the specific PCR product(s) of the alleles amplified by these primer mixes are given.

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 two different control primer pairs give rise to either an internal positive control band of 1070 base pairs, for most wells, or a band of 800 base pairs, for some wells.

Well number 1 contains the primer pair giving rise to the shorter, 800 bp, internal positive control band in order to help in the correct orientation of the HLA-B*40 subtyping.

In addition, wells number 4, 5, 7, 14, 15, 16, 17, 21, 22, 23, 27, 29, 35, 39, 44, 47, 54, 55, 60, 62 and 71 contain the primer pair giving rise to the shorter, 800 bp, internal positive control band in order to allow kit identification.

In the presence of a specific amplification the intensity of the control band often decreases.

³For several HLA-B alleles first exon nucleotide sequences are not available. 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. We assume that unknown sequences in the first exon are conserved within allelic groups.

⁴Due to the sharing of sequence motifs between HLA-B alleles non-HLA-B*40 alleles will be amplified by primer mixes 1, 2, 4 to 22, 25, 26, 28 to 43, 46 to 50, 52, 57, 58, 61, 64 to 66 and 69 to 71.

In addition, the Cw*0206 allele will be amplified by primer mix 5, the HLA-Cw*0305, 0325 and 0327 alleles will be amplified by primer mixes 4, 8 and 13, the Cw*0334 allele will be amplified by primer mix 33, the Cw*0738 allele will be amplified by primer mixes 16, 31, 34 and 66, the Cw*0746 allele will be amplified by primer mix 39, the Cw*0808 alleles by primer mixes 6 and 29 and the Cw*17 alleles faintly by primer mix 7, 23 and 33.

⁵Short specific PCR fragments are less intense and not as sharp as longer specific bands.

⁶Primer mixes 17, 21, 31, 67 and 72 has a tendency of giving rise to nonspecific amplifications.

⁷Primer mixes 7 may faintly amplify the Cw*17 alleles.

⁸Primer mix 35 has a tendency to give rise to a primer dimer artifact.

⁹Primer mix 46 may give rise to less specific PCR product than the other B*40 primer mixes.

¹⁰Primer mix 16: Specific PCR fragment of 75 bp in the B*4015 allele. Specific PCR fragment of 160 bp in the B*401401, B*407201, B*4077 and B*3566, B*420501-420502 and B*4812 and Cw*0738 alleles.

¹¹Primer mix 20: Specific PCR fragment of 135 bp in the B*401401-401403, B*4023 and the B*0707, B*0712, B*0714, B*071801-071802, 9538 and 4108 alleles. Specific PCR fragment of 285 bp in the B*4031 and B*4080 and B*480101-480102, B*4806, B*4807, B*4809, B*4811 B*4814 to 4816, B*4818, B*4819 alleles, B*8101 to 8104N alleles. Specific PCR fragments of 135 and 285 bp in the B*4015, B*4016, B*4032, B*4045 and B*070201 to 0706, B*0708 to 0711, B*0713, B*0715 to 0717, B*0720 to 0732, B*0734 to 0739, B*0741 to 0752, B*0754-0759, B*0761 to 0768, B*3566, B*3707, B*420501-420502, B*4805, B*4808, B*4810 and B*4812 alleles. (Both specific fragments may not always be obtained.)

¹²Primer mix 37: Specific PCR fragment of 125 bp in the B*4051 allele. Specific PCR fragment of 270 bp in the B*4028 and B*1822, 3521, 3524, 3581, 3704, 5104, 5146, 5156, 5302, 5306, 5714, 5809 alleles.

Lot No.: 22F

Lot-specific information

¹³Primer mix 44: Specific PCR fragment of 110 bp in the B*4078 allele. Specific PCR fragment of 205 bp in the B*4054 allele.

¹⁴Primer mix 45: Specific PCR fragment of 175 bp in the B*4056 allele. Specific PCR fragment of 235 bp in the B*4055 alleles.

¹⁵Primer mix 48: Specific PCR fragment of 215 bp in the B*4061 allele. Specific PCR fragment of 245 bp in the B*4073 and B*1806 and 4614 alleles.

¹⁶Primer mix 60: Specific PCR fragment of 135 bp in the B*4082 allele. Specific PCR fragment of 250 bp in the B*4088 allele.

¹⁷Primer mix 65: Specific PCR fragment of 130 bp in the B*400201-400203, 4004-400602, 4008, 4011, 4013-401403, 4019, 4026-4029, 4035, 4037, 4039, 4040, 4050, 4053, 4056-4058, 4064, 4068, 4070-407202, 4075, 4077, 4078, 4082, 4083, 4086, 4090, 4093 and B*0734, 080101-0805, 0808N-0813, 0815-0819, 0821-0827, 0829-0836, 0838, 1303, 1322, 1509, 1542, 1548, 1583, 1586, 1826, 2707, 2711, 2720, 2727, 2733, 2743, 350201-350203, 350401-350403, 3506, 350901-350902, 3512, 3522, 3531, 3559, 3560, 3581, 3583, 3587, 3588, 3712, 380101, 380201-3817, 39010101-39010102L, 390103-390602, 3909, 3910, 3912-3914, 3916, 3919, 3920, 3922, 3924, 3926-3928, 3930-3932, 3934, 3935, 3937-3942, 3945, 4101-410302, 4105-4108, 4201, 4202, 4204-4208, 4410, 4414, 4462, 4611, 4618, 4810, 4812-4814, 510101-510202, 510204-5104, 5106-5116, 5119-512402, 5126, 5128, 5130-5136, 5138-5141N, 5143, 5144N, 5146, 5148-5153, 5155-5160, 5162, 520101-5211, 5213, 5214, 5401-5405N, 5407, 5408N, 5412, 5413, 5417, 550101-5505, 5507, 5508, 5510-5513, 5515-5520, 5522, 5524-5526, 5528-5534, 5601, 5602, 5604-5608, 5610, 5612-5617, 5619N-5624, 570301-570302, 5707, 5709, 5717, 5808, 5820, 5901-5903, 670101-6702, 7801-7806, 8201, 8202 alleles. Specific PCR fragment of 170 bp in the B*4023 and B*1318 and 4819 alleles. Specific PCR fragment of 130 and 170 bp in the B*4015, 4016 and in the B*070501-0706, 0732, 0740, 0753, 0806, 0820, 1530, 1558, 1573, 9550, 3518, 3544, 3908, 3911, 3918, 3933, 3936, 4805, 5105, 5129, 5154, 5161, 5410, 5509, 5521, 5702 and 5712 alleles. (Both specific fragments may not always be obtained.)

Lot-specific information

CE
0088

Lot No.: 22F

Lot-specific information

Well No.																																												
HLA-B allele ²	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6								
*4043	+	+															+									+			+															
*4044		+	+		+				+																					+														
*4045		+		+													+		+		+								+		+													
*4046	+	+					+										+											+	+	+														
*4047	+	+										+					+											+	+	+														
*4048	+	+															+											+	+	+	+													
*4049	+																+											+	+							+								
*4050		+	+	+																			+		+				+		+													
*4051	+	+																									+			+														
*4052	+	+			+												+										+			+														
*4053		+							+																				+		+													
*4054	+	+															+											+	+	+	+													
*4055	+	+															+											+	+	+	+													
*4056		+	+	+																			+						+	+	+													
*4057		+	+	+																			+					+	+	+	+													
*4058				+																			+					+		+						+								
*4059	+	+			+												+		+								+			+	+	+	+											
*4060	+	+															+		+								+			+	+		+											
*4061	+																+										+		+	+	+													
*4062	+	+															+										+		+	+	+													
*4063	+	+															+										+		+	+	+													
*4064		+	+																								+		+	+		+												
*4065	+	+															+										+		+	+	+													
*4066	+	+															+										+		+	+	+													
*4067	+	+																									+		+	+	+													
*4068			+						+		+								+								+		+	+	+	+												
*4069	+	+															+			+							+		+	+	+													
*4070		+	+						+										+		+							+		+	+													
*4071		+	+				+																							+					+									
*407201		+														+	+										+		+	+	+													
*407202		+															+										+		+	+	+													
*4073	+	+															+										+		+	+	+													
*4074	+	+	+														+										+		+	+	+													
*4075			+						+																			+		+	+	+												
*4076	+	+															+										+		+															
*4077		+								+						+	+										+	+	+	+														
*4078		+	+	+																			+					+		+	+													
*4079	+	+															+										+		+	+	+													
*4080		+		+													+		+		+							+		+	+													
*4081	+	+															+										+		+	+	+													
*4082		+	+	+																			+					+		+	+													
*4083		+							+																			+		+	+													
*4084	+	+															+										+		+	+	+													
*4085		+	+	+																			+					+		+	+													
*4086		+	+						+																			+		+	+													
*4087	+	+								+							+										+		+	+	+													
*4088	+	+									+						+										+		+	+	+													
*4089		+	+	+																			+					+		+	+													
*4090		+	+	+																			+					+		+	+													
*4091		+	+	+																			+					+		+	+													
*4092	+	+						+																			+			+														
*4093		+					+		+																				+	+														
Well No.																																												
HLA-B allele ²	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6								

Lot-specific information

CE
0088

Lot No.: 22F

Lot-specific information

Well No.											1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3		
HLA-B allele ²	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6
*070201-0704, 0708, 0710, 0713, 0715, 0716, 0721-072202, 0726, 0729, 0730, 0735-0739, 0741, 0742, 0744-0747, 0749N, 0752, 0754-0759, 0761-0763, 0765-0767N				+	+								+							+		+				+										
*070501-070502, 0706, 0732				+																+		+				+				+						
*070503				+														W		+		+				+				+						
*0707					+															+						+		+								
*0709, 0711					+	+							+							+		+				+				+						
*0712					+														+	+					+		+					+	+			
*0714																				+					+		+				+	+				
*0717						+							+							+		+			+		+			+			+			
*071801-071802					+															+					+		+				+					
*0719, 0807				+									+												+				+							
*0720, 0724				+				+					+							+					+											
*0723				+	+								+							+		+			+											
*0725, 0748				+	+								+					+		+		+			+											
*0727, 0750, 4808				+	+		+						+							+		+			+								+			
*0728				+									+							+		+			+								+			
*0731, 0743				+									+							+					+			+								
*0733				+	+								+							+		+			+											
*0734				+																+					+			+								
*0740, 0753, 2707, 2711, 2743, 3531				+																		+							+							
*0751				+	+								+							+		+								+						
*0760				+				+					+							+		+														
*0764				+									+							+		+														
*0768				+	+								+							+		+			+									+		
*080101-0803, 0805, 0806, 0808N, 0810, 0813, 0815, 0818-0820, 0822-0824, 0826, 0827, 0829-0834, 0836, 0838, 3587, 4201, 4207, 4208, 5504				+																								+								
*0804, 0817				+				+																					+							
*0809, 3916, 4204, 510101-510108, 510201-510202, 510204, 5103, 5105, 5107-510902, 5111N, 5112, 5114, 5119-512401, 5126, 5128-5130, 5132, 5133, 5135, 5136, 5138-5141N, 5143, 5144N, 5148-5155, 5157, 5158, 5160, 5161, 520101-5207, 5209-5211, 5213, 5517, 560501-5606, 5621, 5702-570302, 5707, 5709, 5717, 5808, 7801-7806																																				
*0811				+																																
*0812, 0816, 352, 3544, 3559, 380101, 380201-380202, 3804-3811, 3813-3817, 39010101-39010102L, 390103-390106, 3904, 3905, 3909-3912, 3918-3920, 3922, 3926-3928, 3930, 3932, 3935, 3936, 3938Q, 3940-3942, 3945, 5162, 5508, 5604, 5612, 5820, 670101-6702																											+									
*0814				+																									+							
*0821, 0825				+				+																												
*0828, 0837						+						+																+								
*0835, 4206						+																							+							
*1301, 1307N, 1313, 1317, 1320																			+									+		+		+				
Well No.											1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	
HLA-B allele ²	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6

Lot-specific information

CE
0088

Lot No.: 22F

Lot-specific information

Well No.										1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3			
HLA-B allele ²	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6
*130201-130204, 1308Q, 1314-1316, 1319																			+										+							
*1303, 3560, 5115, 5401, 5403-5405N, 5407, 5408N, 5410, 5412, 5413, 5417, 550101-5503, 5505, 5507, 5510-5512, 5515, 5519-5521, 5525, 5526, 5528-5534, 5601, 5607, 5608, 5613-5617, 5619N, 5620, 5623, 5624, 5901, 5902																			+																	
*1304																			+																	
*1306, 1312, 350101-350107, 3503, 3507-350803, 3510, 3511, 3513-351402, 352001-352002, 3523, 3525-3529, 3534-3536, 3538, 3540N-3542, 3545, 3548, 3549, 3552-3557, 3562, 3564, 3565Q, 356801-3571, 3574-3578, 3580, 3582, 3585, 3590-3594, 530101-530104, 5303-5305, 5308-5313, 5315, 5316, 5609, 5611, 5705, 580101-5802, 5804, 5806, 5807, 5810N-5813, 5815-5817N, 5819																			+								+									
*1309																			+	+									+							
*1310, 4460																					+							+								
*1311																			+								+		+							
*1318, 5509, 5522, 5524																			+									+		+						
*1321																											+		+			+				
*1322, 3588																			+								+		+			+				
*1323		+																	+								+		+			+				
*1401-1404, 140601-1409, 1513, 15170101-151702, 1524, 1536, 1543, 1587, 1589, 1804, 1825, 3532, 3539, 3543, 3561, 3567, 3579, 380102, 3907, 3915, 3917, 3925N, 3943, 3944, 4406, 4408, 4457, 4604, 5142, 5145, 5307, 5406, 5409, 5603, 5618, 5711, 8301																											+									
*1405					+																							+					+			
*15010101-15010102N, 150103-150104, 150106-1502, 1505, 1506, 1508, 151101-1512, 1514, 1515, 1519, 1521, 1525-1528, 1531-1533, 1535, 1538, 1539, 1544, 1550, 1556, 1557, 1560, 1563, 1565, 1566, 1570, 1575-1579N, 1581, 1582, 1584, 1588, 1592, 1594N, 1596, 1597, 9501, 9502, 9504, 9505, 9507, 9509-9511N, 9513, 9520-9522, 9525, 9528, 9535, 9536, 9539, 9540, 9542, 9544-9549N, 460101-4603, 4605, 4607N-4610, 4613, 4615N-4617																			+								+									
*150102																			+		+							+								
*1503, 1554, 1561, 1564, 1569, 1591, 1598, 9503, 9523, 9527, 9531, 9532, 9551						+																						+								
*1504, 9512, 9518, 9529, 9541																				+																
*1507, 1555, 4612					+		+					+								+													+			
*1509																			+									+								
Well No.										1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3			
HLA-B allele ²	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6

Lot No.: 22F

Lot-specific information

																								Well No.
																								HLA-B allele ²
																								*130201-130204, 1308Q, 1314-1316, 1319
																								*1303, 3560, 5115, 5401, 5403-5405N, 5407, 5408N, 5410, 5412, 5413, 5417, 550101-5503, 5505, 5507, 5510-5512, 5515, 5519-5521, 5525, 5526, 5528-5534, 5601, 5607, 5608, 5613-5617, 5619N, 5620, 5623, 5624, 5901, 5902
																								*1304
																								*1306, 1312, 350101-350107, 3503, 3507-350803, 3510, 3511, 3513-351402, 352001-352002, 3523, 3525 3529, 3534-3536, 3538, 3540N-3542, 3545, 3548, 3549, 3552-3557, 3562, 3564, 3565Q, 356801-3571, 3574-3578, 3580, 3582, 3585, 3590-3594, 530101-530104, 5303-5305, 5308-5313, 5315, 5316, 5609, 5611, 5705, 580101-5802, 5804, 5806, 5807, 5810N-5813, 5815-5817N, 5819
																								*1309
																								*1310, 4460
																								*1311
																								*1318, 5509, 5522, 5524
																								*1321
																								*1322, 3588
																								*1323
																								*1401-1404, 140601-1409, 1513, 15170101-151702, 1524, 1536, 1543, 1587, 1589, 1804, 1825, 3532, 3539, 3543, 3561, 3567, 3579, 380102, 3907, 3915, 3917, 3925N, 3943, 3944, 4406, 4408, 4457, 4604, 5142, 5145, 5307, 5406, 5409, 5603, 5618, 5711, 8301
																								*1405
																								*15010101-15010102N, 150103-150104, 150106-1502, 1505, 1506, 1508, 151101-1512, 1514, 1515, 1519, 1521, 1525-1528, 1531-1533, 1535, 1538, 1539, 1544, 1550, 1556, 1557, 1560, 1563, 1565, 1566, 1570, 1575-1579N, 1581, 1582, 1584, 1588, 1592, 1594N, 1596, 1597, 9501, 9502, 9504, 9505, 9507, 9509-9511N, 9513, 9520-9522, 9525, 9528, 9535, 9536, 9539, 9540, 9542, 9544-9549N, 460101-4603, 4605, 4607N-4610, 4613, 4615N-4617
																								*150102
																								*1503, 1554, 1561, 1564, 1569, 1591, 1598, 9503, 9523, 9527, 9531, 9532, 9551
																								*1504, 9512, 9518, 9529, 9541
																								*1507, 1555, 4612
																								*1509
																								Well No.
																								HLA-B allele ²

Lot No.: 22F

Lot-specific information

Well No.										1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3		
HLA-B allele ²	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	3	3	3	
*1510, 1518, 1523, 1529, 1537, 1551, 1572, 1574, 1580, 1590, 1593, 1599, 9508, 9515, 9519, 9533, 9534																												+									
*1516, 1567, 1595, 3537, 5414-5416, 5523, 5527, 5814																			+																		
*1520, 1534, 1585																			+		+							+									
*1530, 1548, 1558, 1573, 9550																					+							+									
*1540, 9517					+																	+						+									
*1542, 4611, 4618																			+			+															
*1545				+				+					+									+													+		
*1546, 9506														+									+					+								+	
*1547					+		+																					+									
*1549, 1552, 9514					+																							+									
*1553																												+								+	
*1562							+												+									+									
*1568						+	+	+					+																						+		
*1571		+																				+						+			+						
*1583, 5712																						+						+									
*1586																			+			+						+									
*9516	+																					+						+									
*9524	+					+					+												+					+									
*9526						+		+															+					+							+		
*9537																				+		+															
*9538					+																+	+					+	+			+						
*9543												+																+									
*180101-180103, 1803, 1805, 1811, 1813, 1815, 1817N, 1819, 1820, 1823N, 1824, 1828, 1830-1832		+																										+				+					
*1802, 1827		+																														+					
*1806		+																										+				+					
*1807, 1829										+																		+				+					
*1808, 1818		+																										+				+					
*1809		+																										+									
*1810, 1821		+			+																							+				+					
*1812		+																										+				+					
*1814		+				+						+																	+			+			+		
*1822		+										+								+												+					
*1826		+																										+				+					
*2708, 2712, 2726, 2740																																+					
*2714									+											+																	
*2718		+					+																									+					
*2719, 2730																												+					+				
*2720, 2727, 5131, 5134																																	+				
*2721																												+									
*2723										+																											
*2729		+					+																														
*2732				+																			+												+		
*2733				+																			+						+			+					
*2734				+	+							+											+														
*2736																		+															+				
*2724				+																			+							+							
*2741					+																																
*2742																																+					
Well No.										1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3		
HLA-B allele ²	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	3	3	3	

Lot-specific information

CE
0088

Lot-specific information

December 2009
Rev. No.: 04u



Lot-specific information

CE
0088

Lot-specific information

CE
0088

Lot-specific information

CE
0088

Lot No.: 22F

Lot-specific information

Well No.	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6
HLA-B allele ²	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6
*5116, 5208																																				
*5146																																				
*5156																																				
*5402, 5516																																				
*5411																																				
*5513, 5622, 5903																																				
*5518																																				
*5713																																				
*5714																																				
*5805																																				
*7301																																				
Well No.	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6
HLA-B allele ²	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6
Cw*0206																																				
Cw*0305, 0325, 0327																																				
Cw*0334																																				
Cw*0738																																				
Cw*0746																																				
Cw*0808																																				
Well No.	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6
HLA-B allele ²	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6

Primer mix 16: Specific PCR fragment of 75 bp in the B*4015 allele. Specific PCR fragment of 160 bp in the B*401401, B*407201, B*4077 and B*3566, B*420501-420502 and B*4812 and Cw*0738 alleles.

Primer mix 20: Specific PCR fragment of 135 bp in the B*401401-401403, B*4023 and the B*0707, B*0712, B*0714, B*071801-071802, 9538 and 4108 alleles. Specific PCR fragment of 285 bp in the B*4031 and B*4080 and B*480101-480102, B*4806, B*4807, B*4809, B*4811 B*4814 to 4816, B*4818, B*4819 alleles, B*8101 to 8104N alleles. Specific PCR fragments of 135 and 285 bp in the B*4015, B*4016, B*4032, B*4045 and B*070201 to 0706, B*0708 to 0711, B*0713, B*0715 to 0717, B*0720 to 0732, B*0734 to 0739, B*0741 to 0752, B*0754-0759, B*0761 to 0768, B*3566, B*3707, B*420501-420502, B*4805, B*4808, B*4810 and B*4812 alleles. (Both specific fragments may not always be obtained.)

Primer mix 37: Specific PCR fragment of 125 bp in the B*4051 allele. Specific PCR fragment of 270 bp in the B*4028 and B*1822, 3521, 3524, 3581, 3704, 5104, 5146, 5156, 5302, 5306, 5714, 5809 alleles.

Primer mix 44: Specific PCR fragment of 110 bp in the B*4078 allele. Specific PCR fragment of 205 bp in the B*4054 allele.

Primer mix 45: Specific PCR fragment of 175 bp in the B*4056 allele. Specific PCR fragment of 235 bp in the B*4055 alleles.

Primer mix 48: Specific PCR fragment of 215 bp in the B*4061 allele. Specific PCR fragment of 245 bp in the B*4073 and B*1806 and 4614 alleles.

Primer mix 60: Specific PCR fragment of 135 bp in the B*4082 allele. Specific PCR fragment of 250 bp in the B*4088 allele.

Primer mix 65: Specific PCR fragment of 130 bp in the B*400201-400203, 4004-400602, 4008, 4011, 4013-401403, 4019, 4026-4029, 4035, 4037, 4039, 4040, 4050, 4053, 4056-4058, 4064, 4068, 4070-407202, 4075, 4077, 4078, 4082, 4083, 4086, 4090, 4093 and B*0734, 080101-0805, 0808N-0813, 0815-0819, 0821-0827, 0829-0836, 0838, 1303, 1322, 1509, 1542, 1548, 1583, 1586, 1826, 2707, 2711, 2720, 2727, 2733, 2743, 350201-350203, 350401-350403, 3506, 350901-350902, 3512, 3522, 3531, 3559, 3560, 3581, 3583, 3587, 3588, 3712, 380101, 380201-3817, 39010101-39010102L, 390103-390602, 3909, 3910, 3912-3914, 3916, 3919, 3920, 3922, 3924, 3926-3928, 3930-3932, 3934, 3935, 3937-3942, 3945, 4101-410302, 4105-4108, 4201, 4202, 4204-4208, 4410, 4414, 4462, 4611, 4618, 4810, 4812-4814, 510101-510202, 510204-5104, 5106-5116, 5119-512402, 5126, 5128, 5130-5136, 5138-5141N, 5143, 5144N, 5146, 5148-5153, 5155-5160, 5162, 520101-5211, 5213, 5214, 5401-5405N, 5407, 5408N, 5412, 5413, 5417, 550101-5505, 5507, 5508, 5510-5513, 5515-5520, 5522, 5524-5526, 5528-5534, 5601, 5602, 5604-5608, 5610, 5612-5617, 5619N-5624, 570301-570302, 5707, 5709, 5717, 5808, 5820, 5901-5903, 670101-6702, 7801-7806, 8201, 8202 alleles. Specific PCR fragment of 170 bp in the B*4023 and B*1318 and 4819 alleles. Specific PCR fragment of 130 and 170 bp in the B*4015, 4016 and in the B*070501-0706, 0732, 0740, 0753, 0806, 0820, 1530, 1558, 1573, 9550, 3518, 3544, 3908, 3911, 3918, 3933, 3936, 4805, 5105, 5129, 5154, 5161, 5410, 5509, 5521, 5702 and 5712 alleles. (Both specific fragments may not always be obtained.)

Lot No.: 22F

Lot-specific information

3			4	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	7	7	7	Well No.
7			8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8
																																	HLA-B allele ²
																																	*5116, 5208
																																	*5146
																																	*5156
																																	*5402, 5516
																																	*5411
																																	*5513, 5622, 5903
																																	*5518
																																	*5713
																																	*5714
																																	*5805
																																	*7301
																																	Well No.
																																	HLA-B allele ²
																																	Cw*0206
																																	Cw*0305, 0325, 0327
																																	Cw*0334
																																	Cw*0738
																																	Cw*0746
																																	Cw*0808
																																	Well No.
																																	HLA-B allele ²

¹The internal positive control primer pairs amplify segments of the human growth hormone gene. The two different control primer pairs give rise to either an internal positive control band of 1070 base pairs, for most wells, or a band of 800 base pairs, for some wells.

Well number 1 contains the primer pair giving rise to the shorter, 800 bp, internal positive control band in order to help in the correct orientation of the HLA-B*40 subtyping.

In addition, wells number 4, 5, 7, 14, 15, 16, 17, 21, 22, 23, 27, 29, 35, 39, 44, 47, 54, 55, 60, 62 and 71 contain the primer pair giving rise to the shorter, 800 bp, internal positive control band in order to allow kit identification.

In the presence of a specific amplification the intensity of the control band often decreases.

²The nucleotide sequence of the B*4017 allele has been shown to be identical B*4016.

The nucleotide sequence of the B*4041 allele has been shown to be identical B*4040.

'w', might be weakly amplified.

Lot No.: 22F

Lot-specific information

Primers

Well No.	1	2	3	4	5	6	7	8	9	10	11	12
5'-primer(s) ¹	363	97	106	363	412	363	206	363	357	97	463	206
	5'-Agg ³	5'-TCC ³	5'-CCg ³	5'-AgC ³	5'-ATg ³	5'-AgC ³	5'-AgA ³	5'-AgC ³	5'-Tgg ³	5'-TCC ³	5'-TgA ³	5'-gAA ³
3'-primer(s) ²	499	272	193	419	559	418	272	559	477	272	499	259
	5'-ggA ³	5'-Tgg ³	5'-CgT ³	5'-CgT ³	5'-CTC ³	5'-gTT ³	5'-Tgg ³	5'-CAG ³	5'-gCg ³	5'-TgA ³	5'-ggA ³	5'-gTT ³
						419					512	
						5'-Cgg ³					5'-CCA ³	
						419						
						5'-CgA 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
5'-primer(s) ¹	363	144	206	486	527	369	379	363	209	363	257	436
	5'-AgC ³	5'-gCA ³	5'-gAA ³	5'-ACC ³	5'-TgT ³	5'-TAC ³	5'-ACC ³	5'-AgC ³	5'-ggC ³	5'-AgC ³	5'-CCC ³	5'-AgA ³
				570				512				
				5'-gAT ³				5'-gTg ³				
3'-primer(s) ²	412	193	317	605	605	435	3 rd I	605	311	559	311	559
	5'-gTC ³	5'-CgT ³	5'-ggA ³	5'-gCT ³	5'-gCT ³	5'-TCT ³	5'-TAT ³	5'-gCT ³	5'-ggT ³	5'-CTC ³	5'-ggT ³	5'-CTC ³
Well No.	13	14	15	16	17	18	19	20	21	22	23	24

Well No.	25	26	27	28	29	30	31	32	33	34	35	36
5'-primer(s) ¹	206	527	106	361	363	412	419	97	355	409	363	97
	5'-gAA ³	5'-TgA ³	5'-CCA ³	5'-AgT ³	5'-AgC ³	5'-ATA ³	5'-gTC ³	5'-TCC ³	5'-TCA ³	5'-ggT ³	5'-AgC ³	5'-TCT ³
				363			420					
				5'-Agg ³			5'-TTA ³					
3'-primer(s) ²	292	605	243	3 rd I	559	559	605	311	559	605	463	193
	5'-gTC ³	5'-gCT ³	5'-TAA ³	5'-TAT ³	5'-CgT ³	5'-CTC ³	5'-gCT ³	5'-ggT ³	5'-CTC ³	5'-gCT ³	5'-gCT ³	5'-CgT ³
Well No.	25	26	27	28	29	30	31	32	33	34	35	36

Well No.	37	38	39	40	41	42	43	44	45	46	47	48
5'-primer(s) ¹	355	355	45	419	97	141	355	412	814	103	89	97
	5'-TCA ³	5'-TCA ³	5'-ggA ³	5'-gTC ³	5'-TCC ³	5'-ATT ³	5'-TCA ³	5'-ATA ³	5'-TgA ³	5'-CCT ³	5'-gAC ³	5'-TCC ³
	499								874			
	5'-TCT ³								5'-Cgg ³			
3'-primer(s) ²	583	435	206	499	259	193	499	479	916	363	193	272
	5'-gTg ³	5'-TCT ³	5'-CCT ³	5'-ggA ³	5'-gTT ³	5'-CgT ³	5'-ggA ³	5'-CCA ³	5'-gAC ³	5'-ATC ³	5'-CgT ³	5'-TgT ³
								577				299
								5'-gCT ³				5'-TCA ³
Well No.	37	38	39	40	41	42	43	44	45	46	47	48

Well No.	49	50	51	52	53	54	55	56	57	58	59	60
5'-primer(s) ¹	419	97	490	512	363	206	523	206	322	363	124	350
	5'-gTT ³	5'-TCC ³	5'-CgA ³	5'-gTT ³	5'-Agg ³	5'-gAA ³	5'-CCg ³	5'-gAA ³	5'-gCC ³	5'-AgC ³	5'-gCC ³	5'-TCg ³
3'-primer(s) ²	499	302	3 rd I	559	488	296	605	263	419	512	272	466
	5'-ggA ³	5'-ggT ³	5'-TAT ³	5'-CAG ³	5'-CCA ³	5'-CTT ³	5'-gCT ³	5'-gTA ³	5'-CgT ³	5'-CCA ³	5'-Tgg ³	5'-gTC ³
		312										559
		5'-A gT ³										5'-CTC ³
Well No.	49	50	51	52	53	54	55	56	57	58	59	60

Lot No.: **22F**

Lot-specific information

Well No.	61	62	63	64	65	66	67	68	69	70	71	72
5'-primer(s) ¹	165	97	363	357	412	499	363	363	477	193	193	363
	5' -ACC 3'	5' -TC C 3'	5' -AgC 3'	5' -Tgg 3'	5' -AT A 3'	5' -TC A 3'	5' -AgC 3'	5' -AgC 3'	5' -gCC 3'	5' -CC A 3'	5' -CC A 3'	5' -AgC 3'
3'-primer(s) ²	203	251	500	419	499	605	409	547	506	412	272	479
	5' -TC C 3'	5' -CC g 3'	5' -gg A 3'	5' -Cg A 3'	5' -ggT 3'	5' -gC T 3'	5' -ATA 3'	5' -gTg 3'	5' -Tg A 3'	5' -gTC 3'	5' -Tg C 3'	5' -CC A 3'
					539							
					5' -TCC 3'							
Well No.	61	62	63	64	65	66	67	68	69	70	71	72

¹The nucleotide position, in the 1st, 2nd, 3rd or 4th exons or 2nd or 3rd intron, matching the specificity-determining 3'-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. 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.

²The nucleotide position, in the 2nd, 3rd or 5th exons or the 1st or 3rd intron, 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.

Lot-specific information

CE
0088

Lot No.: **22F**

Lot-specific information

CELL LINE VALIDATION SHEET																																
HLA-B*40 SSP subtyping kit																																
					Well																											
						17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32											
				Prod. No.:		200852517	200852518	200852519	200852520	200852521	200852522	200852523	200852524	200852525	200852526	200852527	200852528	200852529	200852530	200852531	200852532											
	IHC cell line		B*																													
1	9001	SA	*0702		-	-	-	+	-	+	-	-	-	-	+	-	-	-	-	-	-	-										
2	9280	LK707	*5201	*7301	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+										
3	9011	E4181324	*52011		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
4	9275	GU373	*1510	*5301	-	-	+	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-										
5	9009	KAS011	*3701		-	-	-	-	-	-	-	-	-	+	-	-	+	-	-	-	-	-										
6	9353	SM	*3901	*5101	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-										
7	9020	QBL	*1801		-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	+										
8	9007	DEM	*5701		-	-	+	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-										
9	9026	YAR	*3801		-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-										
10	9107	LKT3	*5401		-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
11	9051	PITOUT	*4403		-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-										
12	9052	DBB	*5701		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
13	9004	JESTHOM	*2705		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
14	9071	OLGA	*1501	*1520	-	-	+	-	+	-	-	-	-	-	-	-	+	-	-	-	-	-										
15	9075	DKB	*4001		+	-	-	-	-	-	-	-	-	-	-	-	+	-	+	-	+	+										
16	9037	SWEIG007	*4002		-	-	-	-	-	+	-	-	-	-	-	-	-	-	+	-	+	+										
17	9282	CTM3953540	*0801	*5501	-	-	+	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-										
18	9257	32367	*1401	*5601	-	-	+	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-										
19	9038	BM16	*1801		-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	+	+										
20	9059	SLE005	*4001		+	-	-	-	-	-	-	-	-	-	-	-	+	-	+	-	+	+										
21	9064	AMALA	*1501		-	-	-	-	+	-	-	-	-	-	-	-	+	-	-	-	-	-										
22	9056	KOSE	*3503		-	-	+	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-										
23	9124	IHL	*4002	*5602	-	-	+	-	-	+	-	-	-	-	-	-	+	-	+	-	+	+										
24	9035	JBUSH	*3801		-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-										
25	9049	IBW9	*1402		-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-										
26	9285	WT49	*5801		-	-	+	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-										
27	9191	CH1007	*0705	*5101	-	-	-	+	-	+	-	-	-	-	+	-	-	-	+	-	-	-										
28	9320	BEL5GB	*4402	*4403	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-										
29	9050	MOU	*4403		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
30	9021	RSH	*4201		-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-										
31	9019	DUCAF	*1801		-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	+	+										
32	9297	HAG	*4102		-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	+	+										
33	9098	MT14B	*4001		+	-	-	-	-	-	-	-	-	-	-	-	+	-	+	-	+	+										
34	9104	DHIF	*3801		-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-										
35	9302	SSTO	*4402		-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-										
36	9024	KT17	*1501	*3501	-	-	+	-	+	-	-	-	-	-	-	-	+	-	-	-	-	-										
37	9065	HHKB	*0702		-	-	-	+	-	+	-	-	-	-	+	-	-	-	-	-	-	-										
38	9099	LZL	*1501		-	-	-	-	+	-	-	-	-	-	-	-	+	-	-	-	-	-										
39	9315	CML	*0801	*2705	-	-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-										
40	9134	WHONP199	*1302	*4601	-	-	+	-	+	-	-	-	-	-	-	-	+	-	+	-	-	-										
41	9055	H0301	*1402		-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-										
42	9066	TAB089	*4601		-	-	-	-	+	-	-	-	-	-	-	-	+	-	-	-	-	-										
43	9076	T7526	*4601		-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-										
44	9057	TEM	*3801		-	-	-	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-										
45	9239	SHJO	*4201	*5001	-	-	+	-	-	-	-	-	-	-	-	-	-	+	-	-	+	+										
46	9013	SCHU	*0702		-	-	-	+	-	+	-	-	-	-	+	-	-	-	-	-	-	-										
47	9045	TUBO	*5101		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
48	9303	TER-ND	*3501	*4403	-	-	+	-	-	-	-	-	-	-	-	-	+	-	-	-	-	-										

Lot No.: 22F

Lot-specific information

CELL LINE VALIDATION SHEET																				
HLA-B*40 SSP subtyping kit																				
					Well															
					33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
				Prod. No.:	200852534	200852534	200852534	200852536	200852537	200852538	200852539	200509940	200852541	200852542	200852543	200852544	200852545	200852546	200852547	200852548
	IHCW cell line		B*																	
1	9001	SA	*0702		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	9280	LK707	*5201		*7301	-	-	-	-	-	-	-	W	-	-	-	-	-	-	-
3	9011	E4181324	*52011			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	9275	GU373	*1510		*5301	-	-	-	-	-	+	-	-	-	-	-	-	-	-	-
5	9009	KAS011	*3701			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	9353	SM	*3901		*5101	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	9020	QBL	*1801			-	-	-	-	-	-	-	+	-	-	-	-	+	-	-
8	9007	DEM	*5701			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	9026	YAR	*3801			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	9107	LKT3	*5401			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	9051	PITOUT	*4403			-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
12	9052	DBB	*5701			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	9004	JESTHOM	*2705			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	9071	OLGA	*1501		*1520	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	9075	DKB	*4001			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	9037	SWEIG007	*4002			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	9282	CTM3953540	*0801		*5501	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	9257	32367	*1401		*5601	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	9038	BM16	*1801			-	-	-	-	-	-	-	+	-	-	-	-	+	-	-
20	9059	SLE005	*4001			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	9064	AMALA	*1501			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	9056	KOSE	*3503			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	9124	IHL	*4002		*5602	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	9035	JBUSH	*3801			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	9049	IBW9	*1402			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	9285	WT49	*5801			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	9191	CH1007	*0705		*5101	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	9320	BEL5GB	*4402		*4403	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
29	9050	MOU	*4403			-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
30	9021	RSH	*4201			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	9019	DUCAF	*1801			-	-	-	-	-	-	-	+	-	-	-	-	+	-	-
32	9297	HAG	*4102			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33	9098	MT14B	*4001			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34	9104	DHIF	*3801			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35	9302	SSTO	*4402			-	-	-	+	-	-	-	-	-	-	-	-	-	-	-
36	9024	KT17	*1501		*3501	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37	9065	HHKB	*0702			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38	9099	LZL	*1501			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	9315	CML	*0801		*2705	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
40	9134	WHONP199	*1302		*4601	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	9055	H0301	*1402			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42	9066	TAB089	*4601			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	9076	T7526	*4601			-	-	+	-	-	-	-	-	-	-	-	-	-	-	-
44	9057	TEM	*3801			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	9239	SHJO	*4201		*5001	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-
46	9013	SCHU	*0702			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	9045	TUBO	*5101			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48	9303	TER-ND	*3501		*4403	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-

Lot-specific information

December 2009
Rev. No.: 04u



Lot No.: **22F**

Lot-specific information

CELL LINE VALIDATION SHEET													
HLA-B*40 SSP subtyping kit													
					Well								
					65	66	67	68	69	70	71	72	
				Prod. No.:	200852565	200852566	200852567	200852568	200852569	200852570	200852571	200852572	
	IHC cell line		B*										
1	9001	SA	*0702		-	+	-	-	-	-	-	-	
2	9280	LK707	*5201	*7301	+	-	-	-	-	-	-	-	
3	9011	E4181324	*52011		+	-	-	-	-	-	-	-	
4	9275	GU373	*1510	*5301	-	-	-	-	-	-	-	-	
5	9009	KAS011	*3701		-	-	-	-	-	-	-	-	
6	9353	SM	*3901	*5101	+	-	-	-	-	-	-	-	
7	9020	QBL	*1801		-	-	-	-	-	-	-	-	
8	9007	DEM	*5701		-	-	-	-	-	-	-	-	
9	9026	YAR	*3801		+	-	-	-	-	-	-	-	
10	9107	LKT3	*5401		+	-	-	-	-	-	-	-	
11	9051	PITOUT	*4403		-	-	-	-	-	+	-	-	
12	9052	DBB	*5701		-	-	-	-	-	-	-	-	
13	9004	JESTHOM	*2705		-	-	-	-	-	-	-	-	
14	9071	OLGA	*1501	*1520	-	-	-	-	-	-	-	-	
15	9075	DKB	*4001		-	-	-	-	-	-	-	-	
16	9037	SWEIG007	*4002		+	-	-	-	-	-	-	-	
17	9282	CTM3953540	*0801	*5501	+	-	-	-	-	-	-	-	
18	9257	32367	*1401	*5601	+	-	-	-	-	-	-	-	
19	9038	BM16	*1801		-	-	-	-	-	-	-	-	
20	9059	SLE005	*4001		-	-	-	-	-	-	-	-	
21	9064	AMALA	*1501		-	-	-	-	-	-	-	-	
22	9056	KOSE	*3503		-	-	-	-	-	-	-	-	
23	9124	IHL	*4002	*5602	+	-	-	-	-	-	-	-	
24	9035	JBUSH	*3801		+	-	-	-	-	-	-	-	
25	9049	IBW9	*1402		-	-	-	-	-	-	-	-	
26	9285	WT49	*5801		-	-	-	-	-	-	-	-	
27	9191	CH1007	*0705	*5101	+	+	-	-	-	+	-	-	
28	9320	BEL5GB	*4402	*4403	-	-	-	-	-	+	-	-	
29	9050	MOU	*4403		-	-	-	-	-	-	-	-	
30	9021	RSH	*4201		+	-	-	-	-	-	-	-	
31	9019	DUCAF	*1801		-	-	-	-	-	-	-	-	
32	9297	HAG	*4102		+	-	-	-	-	-	-	-	
33	9098	MT14B	*4001		-	-	-	-	-	-	-	-	
34	9104	DHIF	*3801		+	-	-	-	-	-	-	-	
35	9302	SSTO	*4402		-	-	-	-	-	+	-	-	
36	9024	KT17	*1501	*3501	-	-	-	-	-	-	-	-	
37	9065	HHKB	*0702		-	+	-	-	-	-	-	-	
38	9099	LZL	*1501		-	-	-	-	-	-	-	-	
39	9315	CML	*0801	*2705	+	-	-	-	-	-	-	-	
40	9134	WHONP199	*1302	*4601	-	-	-	-	-	-	-	-	
41	9055	H0301	*1402		-	-	-	-	-	-	-	-	
42	9066	TAB089	*4601		-	-	-	-	-	-	-	-	
43	9076	T7526	*4601		-	-	-	-	-	-	-	-	
44	9057	TEM	*3801		+	-	-	-	-	-	-	-	
45	9239	SHJO	*4201	*5001	+	-	-	-	-	-	-	-	
46	9013	SCHU	*0702		-	+	-	-	-	-	-	-	
47	9045	TUBO	*5101		+	-	-	-	-	-	-	-	
48	9303	TER-ND	*3501	*4403	-	-	-	-	-	+	-	-	

Lot No.: **22F**

Lot-specific information

CERTIFICATE OF ANALYSIS

Olerup SSP® HLA-B*40 SSP

Product number: 101.523-24u/03u – without *Taq* pol.
 Lot number: 22F
 Expiry date: 2010-November-01
 Number of tests: 24 tests – Product No. 101.523-24u
 3 tests – Product No. 101.523-03u
 Number of wells per test: 72

Well specifications:

Well No.	Production No.	Well No.	Production No.	Well No.	Production No.
1	2008-525-01	25	2008-525-25	49	2008-525-49
2	2008-525-02	26	2008-525-26	50	2008-525-50
3	2008-525-03	27	2008-525-27	51	2008-525-51
4	2008-525-04	28	2008-525-28	52	2008-525-52
5	2008-525-05	29	2008-525-29	53	2008-525-53
6	2008-525-06	30	2008-525-30	54	2008-525-54
7	2008-525-07	31	2008-525-31	55	2008-525-55
8	2008-525-08	32	2008-525-32	56	2008-525-56
9	2008-525-09	33	2008-525-33	57	2008-525-57
10	2008-525-10	34	2008-525-34	58	2008-525-58
11	2008-525-11	35	2008-525-35	59	2008-525-59
12	2008-525-12	36	2008-525-36	60	2008-525-60
13	2008-525-13	37	2008-525-37	61	2008-525-61
14	2008-525-14	38	2008-525-38	62	2008-525-62
15	2008-525-15	39	2008-525-39	63	2008-525-63
16	2008-525-16	40	2008-525-40	64	2008-525-64
17	2008-525-17	41	2008-525-41	65	2008-525-65
18	2008-525-18	42	2008-525-42	66	2008-525-66
19	2008-525-19	42	2008-525-43	67	2008-525-67
20	2008-525-20	43	2008-525-44	68	2008-525-68
21	2008-525-21	45	2008-525-45	69	2008-525-69
22	2008-525-22	46	2008-525-46	70	2008-525-70
23	2008-525-23	47	2008-525-47	71	2008-525-71
24	2008-525-24	48	2008-525-48	72	2008-525-72

The specificity of each primer solution of the kit has been tested against 48 well characterized IHWC cell line DNAs.

No DNAs carrying the alleles to be amplified by primer solutions 6, 16, 23, 24, 25, 27, 31, 34, 37, 38, 40, 42 to 45, 47 to 57, 59 to 63, 65, 67 to 69, 71 and 72 were available. The specificities of the primers in primer solutions 11, 16, 25, 31, 34, 37, 38, 40, 42, 43, 45, 48 to 50, 52, 61, 69 and 71 were tested by separately adding one or two additional 5'-primers, respectively one or two additional 3'-primers. One of the 3'-primers in primer solutions 6 and 48 was not possible to test. In primer solutions 27, 44, 56, 62, 63, 67, 68 and 72 it was only possible to test the 5'-primers, the 3'-primers were not possible to test. In primer solutions 23, 24, 47, 51, 57, 59 and 60 it was only possible to test the 3'-

Lot No.: **22F**

Lot-specific information

primers, the 5'-primers were not possible to test. Finally, one of the primers in primer solution 31 was tested by separately adding one additional 3'-primer.

Results: No false positive or false negative amplifications were obtained.

Date of approval: 2009-December-15

Approved by:

Quality Control, Supervisor

Lot No.: **22F**

Lot-specific information

Declaration of Conformity

Product name: Olerup SSP® HLA-B*40
Product number: 101.523-24u/03u
Lot number: 22F

Intended use: HLA-B*40 high resolution histocompatibility testing

Manufacturer: Olerup SSP AB
Hasselstigen 1
SE-133 33 Saltsjöbaden, Sweden
Phone: +46-8-717 88 27
Fax: +46-8-717 88 18

We, Olerup SSP AB, hereby declare that this product, to which this Declaration of Conformity relates is in conformity with the following Standard(s) and other normative document(s) ISO 9001:2000 and ISO 13485:2003, following the provisions of the 98/79/EC Directive on *in vitro* diagnostic medical devices, Annex II List B, conformity assessed using Annex IV, as transposed into the national laws of the Member States of the European Union.

The Technical Documentation File is maintained at Olerup SSP AB, Hasselstigen 1, SE-133 33 Saltsjöbaden, Sweden.

The Authorized Representative located within the Community is: Olerup SSP AB.

Notified Body: Lloyd's Register Quality Assurance Limited, Hiramford, Middlemarch Office Village, Siskin Drive, Coventry CV3 4FJ, United Kingdom. (Notified Body number: 0088.)

Saltsjöbaden, Sweden
2009-December-15

Olle Olerup
Managing Director

Lot No.: **22F**

Lot-specific information

Lot No.: **22F**

Lot-specific information

Lot No.: **22F**

Lot-specific information

ADDRESSES:

Manufacturer:

Olerup SSP AB, Hasselstigen 1, SE-133 33 Saltsjöbaden, Sweden.

Tel: +46-8-717 88 27

Fax: +46-8-717 88 18

E-mail: info-ssp@olerup.com

Web page: <http://www.olerup.com>

Distributed by:

Olerup GmbH, Löwengasse 47 / 6, AT-1030 Vienna, Austria.

Tel: +43-1-710 15 00

Fax: +43-1-710 15 00 10

E-mail: support-at@olerup.com

Web page: <http://www.olerup.com>

Olerup Inc., 901 S. Bolmar St., Suite R, West Chester, PA 19382

Tel: 1-877-OLERUP1

Fax: 610-344-7989

E-mail: info.us@olerup.com

Web page: <http://www.olerup.com>

For information on *Olerup* SSP distributors worldwide, contact **Olerup GmbH**.