

Positive reaction	Sero.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24a	24b
Spezifität / Specificity	DR1, Null	1																	18							
*01:01-11:15,01:11,7:01-19-02,03,02,05-02,06,02,08-02,10,04-05,07-08,11:01-11:02,12w,13,17-22,25-38,40N-41,43-44,01,45-50,52N-53,57-60,62N-65,67	DR1, Null	1																	18							
*01:01:16,01:18,02:04,02:07,06,09-10,14-16,44:02,55-56,66	DR1, Null	1																	18							
*01:03,39N,42,61	DR103, Null, -		2														15		18							
*01:23w,24,01,51,54 / *08:57 / *10:12	DR15(2), DR2, -					3													18							24b
*15:01:01-01:21,01:24-20,22-24,26,29-31,33,35-46w,47-49,51-53,55-65,67-79,81-83,85-99,101-102,104-113N,114,116	-					3													18							24b
*15:32	-					3													18							24b
*15:66,02	DR16(2), DR2, -					4													18							24b
*16:01-01:04,01:06-05,02,07-11,13N-29	-					4													18							24b
*16:01:05	DR17(3), DR3, Null					4													18							24b
*03:01:01-01:05,01:07-01:11,01:13-01:22,01:24,04:01,05:01-05:03,07,09,11:01,13:01-15,18-25,28,30,32-34,36-37,39-40,43-48,50-52,54-59,61-64,66-73,77-78,81,82w,83,86,88,91,93-95w,97-100,102,104-110,112-114,116-118	DR17(3)					5													19							23
*03:01:06	DR17(3)					5													19		w		22			23
*03:01:12,04,02,12,79,96	- DR3					5													16							23
*03:02:01-03,53,74,88,90,102-103,115	DR18(3), -					5		6											19							23
*03:01:23,06,16-17,26-27,31,35,41,60,75,80	DR3, -					5													16							23
*03:08,65 / *11:07,103,105,125,173	DR11(5)					5		6					12	13					19							23
*03:10	DR17(3)					5							12	13					19							23
*03:29-101	-					5		6					12	13					19			21				23
*03:38	-					5		6					12	13					19							23
*03:49	-					5		6					12	13					19							23
*03:76	-					5		7					12	13					17							23
*03:84	-					5							12	13					19							23
*03:85 / DRB3*01:14	-					5							12	13					16							23
*04:01:01-01:16,03:02,03:04,04:02,04:06-04:07,05:01-05:11w,05:13-05:17w,05:18,06:03-06:04,07:02,08:02-13,16-17,02,21-22,26,28-30,33-35,38,40,45,48,56-02,57,62,64-67,72-01-73,75-77,80-84,86-87,89-91,97-100,103-107,111-117,119N,122-123,125-128,130-131,135-137,139-141,146-147,150-153,155,158N-159,162,169,171,173-175,178N-179,184	DR4, -					7													15							24a
*04:02:01-02,03,14,18,124,133-134,185	DR4, -					7													15							24a
*04:03:01,03,03,05-04,01,04,03-04,05,04,08-04,09,06,01-06,02,06,05-07,01,07,03-08,01,19-20,23,25,27,31-32,36-37,39-41,44-46,47,49-56,01,58-60,68,70-71,74,79,85,88,92-96,102,108w,109,118,120N-121,129,132,142N-144,148-149,156-157N,160,163-166w,167,172w,176-177,180-183,186N	DR4, - Null					7													18							24a
*04:15,61,145,154,170	DR4, -					7													12							24a
*04:24,69	DR4, -					7													12							24a
*04:78,101,168	-					7													18		20					24a
*04:110	-					7													18		20					24a
*04:138	-					7													18		20					24a
*07:01-01:01-01:02,01:02w-01:08,03-05,07-19,21,23,25-35	DR7, - Null					7								12	13				18							24a
*07:06	-					7			8					12	13				18							24a
*08:01-01-01:05,03:02-03:05,04:06,05-07,10-12,14,16-19,22-23,25-27,29,30,02:31-34,36:01-37,39-41,43,46-56,58,60N-62,64-66,68	DR8, - DR11(5)					7			8					12	13				18							24a
*08:02:01-02,04,04:01-04,05,04:07,13,24,28,42,44,59,67	DR8, -					7			9					12	13				18							24a
*08:08,15,63 / *11:67	DR8, -					7			9					12	13				18							24a
*08:09,21/14:15	DR8, -					7			9					12	13				18							24a
*08:20/13:47	DR8, -					7			9					12	13				18							24a
*08:30:01,30:03,45	-					7			9					12	13				15							24a
*08:35	-					7			9					12	13				18							24a
*08:38	-					7			9					12	13				18							24a
*09:01-02-02:01,03-22,24	DR9, -					7			9					10					18							24a
*09:02:02	-					7			9					10					18							24a
*10:01-01-04,06-11,13,14	DR10, -					7			9					10					18							24a
*10:05	-					7			9					10					18							24a
*11:01:01-01:25,04:01-12,06:01-06,03,08:01-10,02,12:01-12,02,15,24,27:01-29,32-33,35,37:01-39,42-44,46:01-47,49:01-51,54:01-54,02,56-58,02,60-62,02,66,72,74:01-75,77-78,80-81,83-84,03:87-88,90-97,99-101,104,106,108-117,120-121,123,126,128-130,133-135,137,140-150,152,154-158,160,162-167,169N,170,172,174	DR11(5), -					7			9					10					18							24a
*11:02:01-02,14:01-14,02,16,20-21,65:01-65,02,70,86,118,124,127	DR11(5), -					7			9					10					18							24a
*11:03,11:01-11:03,36,40,59,63:01-63,02,68,76,85,122,138-139,151,161,168,176	DR11(5), -					7			9					10					18							24a
*11:05,22,30	DR11(5), -					7			9					10					18							24a
*11:13:01-13:02,89,159	DR11(5), -					7			9					10					18							24a
*11:17,52	- DR11(5)					7			9					10					18							24a
*11:18-19:03,31,73,98,132	- DR11(5)					7			9					10					18							24a
*11:23:01-23:02,25,64	DR11(5), -					7			9					10					18							24a
*11:26,34	DR11(5), -					7			9					10					18							24a
*11:41	-					7			9					10					18							24a
*11:45,119	-					7			9					10					18							24a
*11:48,171	-					7			9					10					18							24a
*11:53,136	-					7			9					10					18							24a
*11:55,79,131	-					7			9					10					18							24a
*11:69,82	-					7			9																	

Mix	5'Primer *	3'Primer *	Größe/ Size (bp)	Spezifität / Specificity DRB1*
1	129 GAA	286 GAG 298 GCG	200 / 210	01:01:01:02:10,04-22,25-33N,34-38,40N,41,43-50,52N,53,55-60,62N,63-67 (Mix zeigt manchmal eine schwache unspezifische Bande bei ca. 70bp / Mix shows sometimes a weak unspecific band at about 70bp)
2	129 GAA	286 GAT	200	01:03,39N,42,61
3	126 AGG	294 TCT 298 GCG	210	15:01:01:01-09, 10 ,11-17N,18-20,22-24,26,29-33,35-46w,47-49,51-53,55-65,67-79,81-83,85-99,101,102,104-113N,114,116
4	126 AGG	286 GAG 286 GAA 297 CTG	200 / 210	16:01:01-05:02,07-11,13N-21N,22-29 (Mix zeigt manchmal eine schwache unspezifische Bande bei ca. 70bp / Mix shows sometimes a weak unspecific band at about 70bp)
5	125 GTC	305 GGC 305 TGC	220	03:01:01:01-10, 11:01 ,12-16, 17 ,18-23, 24,25,26,27,28 -41,43-67N,68N-75,77-83,85,86,88-91,93-95w,96-110,112-118 / 11:07, 53 ,103,105,107,125,136,173 / 14:104w,111w / DRB3*01:14
6	171 GAG	305 GGC 259 GAG	175 85	03:02:01,02:02,03,29,38,53,74,88,90,101-103,115 / DRB3*02:22 03:08,65 / 11:07,103,105,107,125,173
7	184 GTC	344 CAC 344 CCA	200	04:01:01-05:11w,05:13-05:17w,05:18-62,64-81N,82-94N,95:01-109,111-119N,120N-142N,143-157N,158N-160,162-172w,173-178N,179-186N / 03:49 / 08:38 / 11:102:01,102:02,175
8	127 ATA	344 CAC	260	07:01:01:01-01:02w,01:03-01:08,03-10N,11-19,21,23,25,26N-35
9	133 GTT	307 CAG 344 CAC 260 CCT	215 250 215+250 170 170+215	08:04:01-04:07,06,10,12,22,28,39,54,59,64,65,67w / 14:15 08:05,18,24,25,29,40,41,43,47 / 12:16:01-16:03,22,39 / 14:68:01,68:02,93 08:01:01-03:05,07-09,11,13-17,19,21,23,26,27,30:01-30:03,32-38,42,44-46,48-53,55,56,58,60N-63,66,68 08:31,41 / 12:04,49 / 14:11,148w 11:67
10	169 TGC	267 CAG	140	09:01:02-22,24
11	178 GCG	344 CAC 344 CCA	205	10:01:01-01:06,03-11,13,14 10:02
12	119 GCT 125 GTC 125 ACA 133 GTC	260 CCT	170 / 180	03:08,65 / 04:15,61,138,145,154,170 / 11:01:01-29, 30 ,31-66,68-70,72-169N,170-176 / DRB3*02:18 (manchmal schwach positiv / sometimes weak positive)
13	261 GAG 265 AGC	298 CTC 305 GGC 307 CAG	80	03:08, 10,65 / 04:138 / 08:08,15,63 / 11:02:01-03,07,11:01-11:03,14:01,14:02,16,20,21,23:01,23:02,25,36,40,41,45,48,53,59,63:01-65:02,67,68,70,76,85,86,103,105,107,118,119,122,124,125,127,136,138,139,151,161,168,171,173,176 / 13:43,45,159,179,191 / 14:16,55,79,104w,107w,111w / DRB3*02:16,18
14	175 GAC	297 CTG	165	*12:01:01-24N,25,26,28-31N,32w-40w,42-55
15	125 GCT 116 GTC 261 GCC	286 GAT	223 / 213 91 + 213 91	11:02:01,02:02,14:01,14:02,16,18-21,31,45,48,65:01,65:02,70,73,86,98,118,119,124,127,132,153w,171 / 13:01:05,03:01-04,12:01-13,30-34,38,45,48,58,65-66:02, 67,72,77 ,81,89,90,93-95,101,113N,115,171:01,117:02,118,120,122,127,133,139,151,152,154,159,161,162,167,174,179,188,191,194, 195 / 14:16,63,78 13:01:01-01:04,01:06-02:11,06,08,10,15,16,19,22-23:02,27,28,35-37,39-41,51-53,57,59,61:01,61:02,64,68-70,73,74,76,79,80,82-85,87,91,92,96:01,96:02w-99,102-107,109,110w,112,117,121,123-126,128,130,131,135,137N,138,140w-142N,143,145-148,153,155-157,160,163,165,166,168,170,172,173,176-178w,181-185N,186,187,190 / 14:67 01:03,39N,42,61 / 04:02:01-02:03,14,18,124,133,134,161,185 / 08:30:01,30:03,45 / 12:09,48 / 13:17,116,175
16	125 GTC	256 GCT 257 CGA 258 GCG 298 GCG	170 / 215	03:01:12,04:02,12, 38 ,79,85,96 / 11:69,82 / 13:01:05,02:03 :03:01-04, 07:02 ,09, 11:02 ,12:01-13, 14:02 ,21:01,21:02, 26:01 ,30, 31 ,32,33:01-33:03,38, 46 ,48,49, 54 ,55,58, 60 ,65,66:01,66:02,75, 77 ,81,88-90,93-95,100,101,108,115,118,120,122,129,133,134,139,151,152,154,161,162,164,167,169,174,180,188,192,194 / 14:13,23:04,24,37, 48 ,63,65,78,85 / DRB3*01:14
17	125 GTC	296 TCT 297 TTC 298 GCG 307 CAG	200 / 210	03:76 / 08:20 / 11:23:01,23:02,25,26,34,45,55,64,69,79,82,119,131,153 / 13:09,13,18,44,47,55,86,129,144,146,154,156,158,164,178,192,193,196 / 14:02:01-03:02,06:01-06:03,09,12:01-13,17,19-21,24,27,29,30,33,37,40,41,47-49,51,55,63,67,77,78,80,83-85,89,94,98w,102,106,108,109,115,116,119,121,135-137N,144,146,156,159
18	261 GCC	298 CTC 298 CCT	80	01:01:01-01:15,01:17,01:19-02:03,02:05,02:06,02:08-02:10,03-05,07,08,11:01-12w,13,17-23w,24:01-33N,34-39N,40N-52N,53,54,57-62N,63-65,67 / 04:02:01-02:03,03:01,03:03,03:05-03:10,04:01,04:03-04:05,04:08,04:09,06:01,06:02,06:05,07:01,07:03-07:05,08:01,14,18-20,23,25,27,31,32,36,37,39,41-44,46,47,49-56:01,58-60,68,70,71,74,78,79,85,88,92-94N,95:01-96,101,102,108w-110,118,120N,121,124,129,132-134,142N-144,148,149,156,157N,160,161,163-166w,167,168,172,176,177,180-183,185,186N / 08:02:01-02:04,04:01-04:05,04:07,09,13,20,21,24,28,30:01,30:03,42,44,45,57,59,67 / 09:02:02 / 10:01:01-04,06-09w,10-14 / 12:09,48 / 13:01:01-01:04,01:07-02:02,02:04-02:11,05:01-07:01,08,11:01,14:01,14:03,15-20,22-25,26:02-29,34-36,39-42,44,47,50:01-53,56,57,59,61:01-64,67-71,73,74,76,78-80,82-84,86,87,91,92,96:01-99,102-107,109,110w-113N,114,116,117,119,121,123-126,128,130-132,135,136,138,140-142N,143-150,153,155-158,160,163,165,166,168,173,175,177,181-185N,186,187,189,190,193,195 / 14:02:01-03:02,05:02,06:01,06:02,09,12:01,12:02,14,15,17,20,23:01,27,29,30,33,36,40-42,46,47,51,52,59,64,67,72,77,80,81,83,84,89,94,95,98,102,106,108,115,116,121,123,126:01,134,135,144,155,156,159 / 15:66:02 / 16:01:05 Achtung: Kontrollbände in Mix 18 kleiner: 434 bp !!! / Control band in mix 18 is smaller: 434 bp !!
19	125 GTC	227 GGA 286 GAA	145 200 145+200	03:01:01:01-01:22,01:24,04:01-05:03,07-15,18-25,28-30,32-34,36,37,39,40,43-52,54-59,61-67N,68N-73,76-79,82w-84,86,89,91,93-101,104-110,112-114,116-118 / 11:02:01,02:02,07-08:03,13:01-14:02,16,18-21,26,31,34,36,42,45,53,57,64,65:01,65:02,68-70,73,79,82,86,89,98,103,105,122,124,125,127,130-132,136,138,139,153,159,168,173,176 / 13:01:01-01:09w,01:10-02:11,04,06,09,10,15,16,20,22-23:02,25,27-31,34,39,41,43-45,51,52,56,57,59,61:01,61:02,64,66:01,66:02,68,69,71,73,74,77-79,82,83,86,87,91-93,96:01-99,102,103w-107,109,110,112,113N,114,117,119,121,123-131,137N-142N,143,145-148,153-157,160,162,163,165,166,168-173,176,177w-179,181,184,185N-187,190,192,193,195,196 / 14:17,21,30,33,42,53,64,65,72,95,132,134 08:20 / 11:37:01,37:02,50,56,83,88,145,149,170 / 13:07:01,07:02,26:01,26:02,47,49,55,108,164,189 / 14:22,25,27,105 11:01:01-01:25,03-04:12,06:01-06:03,09-12:02,15,23:01-25,27:01-29,32,33,35,38-40,43,44,46:01-47,49:01,49:02,51,54:01-55,58:01-63:02,66,72,74:01-78,80,81,84:01-85,87,90-97,99-102:02,104,106,108-121,123,126,128,129,133-135,137,140-144,146-148,150-152,154-158,160-167,169N,172,174,175 / 13:05:01-05:02,11:01,11:02,14:01-14:03,18,21:01,21:02,24,42,46,50:01,50:02,54,62,63,75,100,111,132,136,144,150,158 / 14:35,128
20	122 TAC 125 ACA	296 TCC	215	04:24,69,78,101,168 / 11:13:01,13:02,17,52,89,159 / 14:01:01-01:04,04:01-05:04,07:01-08,10,11,14,18,23:01-23:04,26,28,31-32:02,34-36,38:01-39,42-45,50,54:01-54:05,56,58-62,64,65,68:01,68:02,70-72,75,81,82,86-88,90-92N,93,95-97,99-101,103,110,112-114,117,118,120,122-127:02,129-134,138-140,142,143,145,147-151,153-155,157,158
21	125 GTC	260 CCG 296 TCT	175 210	03:01:06w,10 / 13:43,45,159,171:01w,179,191 / 14:01:01-01:04,07:01-08,16,22,23:02w,25,26,32:01-32:03,34,35,38:01,38:02,49,53-55,58,60,62,69,70,74,75,82,86-88,90,92N,97,99,101w,104,105,110-114,117-119,122,124,125,128,129,131-133,137N,139,140,142,147,149-151,153,157,158 11:26,34 / 13:44,86,193,196w / 14:02:01,02:02,06:01-06:03,09,13,17,20,29,30,33,41,47,48,51,80,83,89,94,106,108,109w,119,121,146,159
22	196 AGA 197 GTT	260 CCG 296 TCT 298 GCG 307 CAG	105 / 140 / 150	03:01:06 / 07:06 / 08:09,21,35 / 13:09,18,129,144,146,156,158,171:01,192,193 / 14:02:01-03:02,06:01-06:03,09,12:01-13, 15 ,17,19, 20,21,23:02 ,24,27,29,30, 33,37,40,41 ,46-48, 49,51,52,55,57 ,63,67, 76,77 ,78,80,83-85,89,92Nw,93,99,101,105,108,110,115,119,121,135,136,144 / 15:32
23	116 GCT	317 AAT	240	DRB3*01:01:02:01-13,15 / *02:01,02:01:02,02:01:02,02:03-02:05,03,05-14,16-26,28,29N / *03:01:01-03 (DR52) / DRB1*14:141
24	125 GTA 213 AGT	261 TCA	90 175	a) DRB4*01:01:01-01-08 / *02:01N (DR53) b) DRB5*01:01:01-08N,09,10N,11,14,15 / *02:02-06 (DR51)

* kursiv gedruckte Allele: Die positiven Reaktionen konnten nicht experimentell überprüft werden. / Alleles in italics: positive reactions were not verified experimentally.

• Die folgenden Allele werden nicht erkannt: / The following alleles cannot be detected:

DRB1*01:24:02 / *03:42,87,92,111 / *04:63 / *07:20,22,24 / *08:01:06 / *09:23 / *12:27,41 / *14:73,76,152N / *15:01:22:01:23,21,25,27,28,34,50N,54,66:01,80N,84,100,103,115N,117 / *16:12 / DRB3*02:02:02,04,15,27 / DRB4*03:01N / DRB5*01:12,13



BAG Health Care GmbH
Amtsgerichtsstraße 1-5
35423 Lich/Germany

Tel.: +49(0) 6404/925-0
Fax: +49(0) 6404/925-250
www.bag-healthcare.com
info@bag-healthcare.com

Auftragsannahme/Ordering:
Tel.: +49(0) 6404/925-450
Fax: +49(0) 6404/925-460
verkauf@bag-healthcare.com

Customer Service:
Tel.: +49(0) 6404/925-125
Fax: +49(0) 6404/925-421
service@bag-healthcare.com