

[図1A]

HLA-A*24:02:01:01の5'ノムDNA

-291	-281	-271	-261	-251	-241	-231	-221	-211	-201
CAGAAGCAGA	GGGGTCAGGG	CGAAGTCCCA	GGGGCCCCAGG	CGTGCTCTC	AGGGTCTCAG	GCCCCGAAGG	CGGTGTATGG	ATTGGGGAGT	CCCAGCCCTTG
-191	-181	-171	-161	-151	-141	-131	-121	-111	-101
GGGATTCCCC	AATCCCGCAG	TTTCTTTTCT	CCCTCTCCCA	ACCTATGTAG	GGTCTCTTCT	CCTGGATACT	CACGACGGG	ACCCAGTTCT	CACTCCCAAT
-91	-81	-71	-61	-51	-41	-31	-21	-11	-1
GGGTCTCGGG	TTTCCAGAGA	AGCAATCAG	TGTCGTCGG	GTGCTGTTC	TAAAGTCCG	ACGCACCCAC	CGGGACTCAG	ATTCTCCCA	GACGCCGAGG
10	20	30	40	50	60	70	80	90	100
ATGGCCGTCA	TGGGGCCCCG	AACCCTCGTC	CTGCTACTCT	CGGGGGCCCT	GGCCCTGACC	CAGACCTGGG	CAG	GTGAGTG	CGGGGTCTGGG
110	120	130	140	150	160	170	180	190	200
CCTCTGCGGG	GAGAAGCAAG	GGGCCCCGCCT	GGCGGGGGCG	CAAGACCCGG	GAAGCCCGCG	CGGGAGGAGG	GTCCGGGGCGG	TCTCAGCCAC	TCCCTCGTCCC
210	220	230	240	250	260	270	280	290	300
CAG	GCTCCCA	CTCCATGAG	TATTCTCCA	CATCCGTGTC	CCGGCCCGGC	CGCGGGGAGC	CCCGCTTCAT	CGCCGTGGGC	TACGTGGAG
310	320	330	340	350	360	370	380	390	400
CGTCCGGTTC	GACAGCGAG	CCGCGAGCCA	GAGGATGGAG	CCGCGGGCGC	CGTGGATAGA	GCAGGAGGGG	CCGGAGTATT	GGGACGAGGA	GACAGGGGAAA
410	420	430	440	450	460	470	480	490	500
GTGAAGGCC	ACTCACAGAC	TGACCGAGAG	AACCTCGGA	TTGGCTGGG	CTACTACAAC	CAGAGCGAGG	CCG	GTGAGTG	ACCCCGGGCC
510	520	530	540	550	560	570	580	590	600
TCACGACCCC	TCATCCCCCA	CGGACGGGGC	GGGTGCCCCA	CAGTCTCCGG	GTCCGAGATC	CACCCCGAAG	CCGGGGGACC	CCGAGACCCCT	TGCCCCGGGA



図1B

[図1B]

610	620	630	640	650	660	670	680	690	700
GAGGCCAGG	CGCCTTAAC	CGGTTTCAT	TTTCACTTTAG	GCCAAAATC	CCCCCGGGT	GGTCGGGGCC	GGGGGGGGCT	CGGGGGAGTG	GGCTGACCGC
710	720	730	740	750	760	770	780	790	800
GGGGTCGGGG	CCAGGTTCTC	ACACCCTCCA	GATGATGTTT	GGCTGGGACG	TGGGGTCGGA	CGGGCGCTTC	CTCCGGCGGT	ACCACCACTA	CGCCTACGAC
810	820	830	840	850	860	870	880	890	900
GGCAAGGATT	ACATCGCCCT	GAAAGAGGAC	CTGGGCTCTT	GGACCGCGGC	GGACATGGCG	GCTCAGATCA	CCAAGCGCAA	GTGGGAGGCG	GCCCATGTGG
910	920	930	940	950	960	970	980	990	1000
CGGAGCAGCA	GAGAGCCTAC	CTGGAGGGCA	CGTGGCTGGA	CGGGCTCCGC	AGATACCTGG	AGAACGGGAA	GGAGACGCTG	CAGCGCACGG	GTACCAGGGG
1010	1020	1030	1040	1050	1060	1070	1080	1090	1100
CCACGGGGGG	CCTACCTGAT	CGCCTGTAGG	TCTCCCGGGC	TGGCCTCCCA	CAAGGAGGGG	AGACAATTGG	GACCAACACT	AGAATATCGC	CCTCCCTCTG
1110	1120	1130	1140	1150	1160	1170	1180	1190	1200
GTCTGAGGG	AGAGGAATCC	TCTTGGGTTT	CCAGATCCTG	TACCAGAGAG	TGACTCTGAG	GTTCGCGCCT	GCTCTCTGAC	ACAATTAAGG	GATAAAATCT
1210	1220	1230	1240	1250	1260	1270	1280	1290	1300
CTGACGGAAT	GACGGAAAGA	CGATCCCTCG	AATACTGATG	ACTGGTTCCC	TTTGACACCG	GCAGCAGCCT	TGGGACCGTG	ACTTTTCCTC	TCAGGCGCTG
1310	1320	1330	1340	1350	1360	1370	1380	1390	1400
TTCTCTGCTT	CACACTCAAT	GTGTGTGGGG	GTCTGAGTCC	AGCACTTCTG	AGTCCTCTAG	CCTCCACTCA	GGTCAGGACC	AGAAGTCGCT	GTTCCTCTCT
1410	1420	1430	1440	1450	1460	1470	1480	1490	1500
CAGGGAATAG	AAGATTATCC	CAGGTGCCTG	TGTCCAGGCT	GGTGTCTTGG	TTCTGTGCTC	TCTTCCCAT	CCCGGGTGTC	CTGTCCATTC	TCAAGATGGC



[図1C]

1510	1520	1530	1540	1550	1560	1570	1580	1590	1600
CACATGCATG	CTGGTGGAGT	GTCCCATGAC	AGATGCAAAA	TGCCTGAATT	TTCTGACTCT	TCCCGTGAG	CCCCCCCCAAG	ACACATATGA	CCCACACCACC
1610	1620	1630	1640	1650	1660	1670	1680	1690	1700
CATCTCTGAC	CATGAGGCCA	CTCTGAGATG	CTGGGCCCTG	GGCTTCTACC	CTGGGGAGAT	CACACTGACC	TGGCAGCCGG	ATGGGGAGGA	CCAGACCCAG
1710	1720	1730	1740	1750	1760	1770	1780	1790	1800
GACAGGGAGC	TTGTGGAGAC	CAGGCCTGCA	GGGGATGGAA	CCTTCCAGAA	GTGGGCAGCT	GTGGTGGTAC	CTTCTGGAGA	GGAGCAGAGA	TACACCTGCC
1810	1820	1830	1840	1850	1860	1870	1880	1890	1900
ATGTGCAGCA	TGAGGGTCTG	CCCAAGCCCC	TCACCTGAG	ATGGG	GTAAG	GAGGGAGATG	GGGGTGTGAT	GTCTCTTAGG	GAAAGCAGGA
1910	1920	1930	1940	1950	1960	1970	1980	1990	2000
AGACCTTTAG	CAGGGTCAGG	GCCCCCTCACC	TTCCCTCTTT	TTCCAG	AGC	CATCTTCCCA	GCCCACCCCTC	CCCATCGTGG	GCATCATTCG
2010	2020	2030	2040	2050	2060	2070	2080	2090	2100
CTCCTTGGAG	CTGTGATCAC	TGGAGCTGTG	GTGCTGTCTG	TGATGTGGAG	GAGGAACAGC	TCAG	GTGGAG	AAGGGGTGAA	GGGTGGGGTC
2110	2120	2130	2140	2150	2160	2170	2180	2190	2200
TGTCTCACTG	AGGGTTCCAA	GCCCCAGCTA	GAAATGTGCC	CTGTCTCATT	ACTGGGAAGC	ACCATCCACA	ATCATGGGCC	GACCCAGCCT	GGGCCCCCTGTG
2210	2220	2230	2240	2250	2260	2270	2280	2290	2300
TGCCAGCACT	TACTCTTTTG	TAAAGCACCT	GTGACAAATGA	AGGACAGATT	TATCACCTTG	ATTATGGCGG	TGATGGGACC	TGATCCCAGC	AGTCACAAGT
2310	2320	2330	2340	2350	2360	2370	2380	2390	2400
CACAGGGGAA	GGTCCCTGAC	GACAGATCTC	AGGAGGGGGA	TTGGTCCAGG	GCCCCACATCT	GCTTCTCTCA	TGTTTCCCTGA	TCCTGCCCTG	GGTCTGCAGT



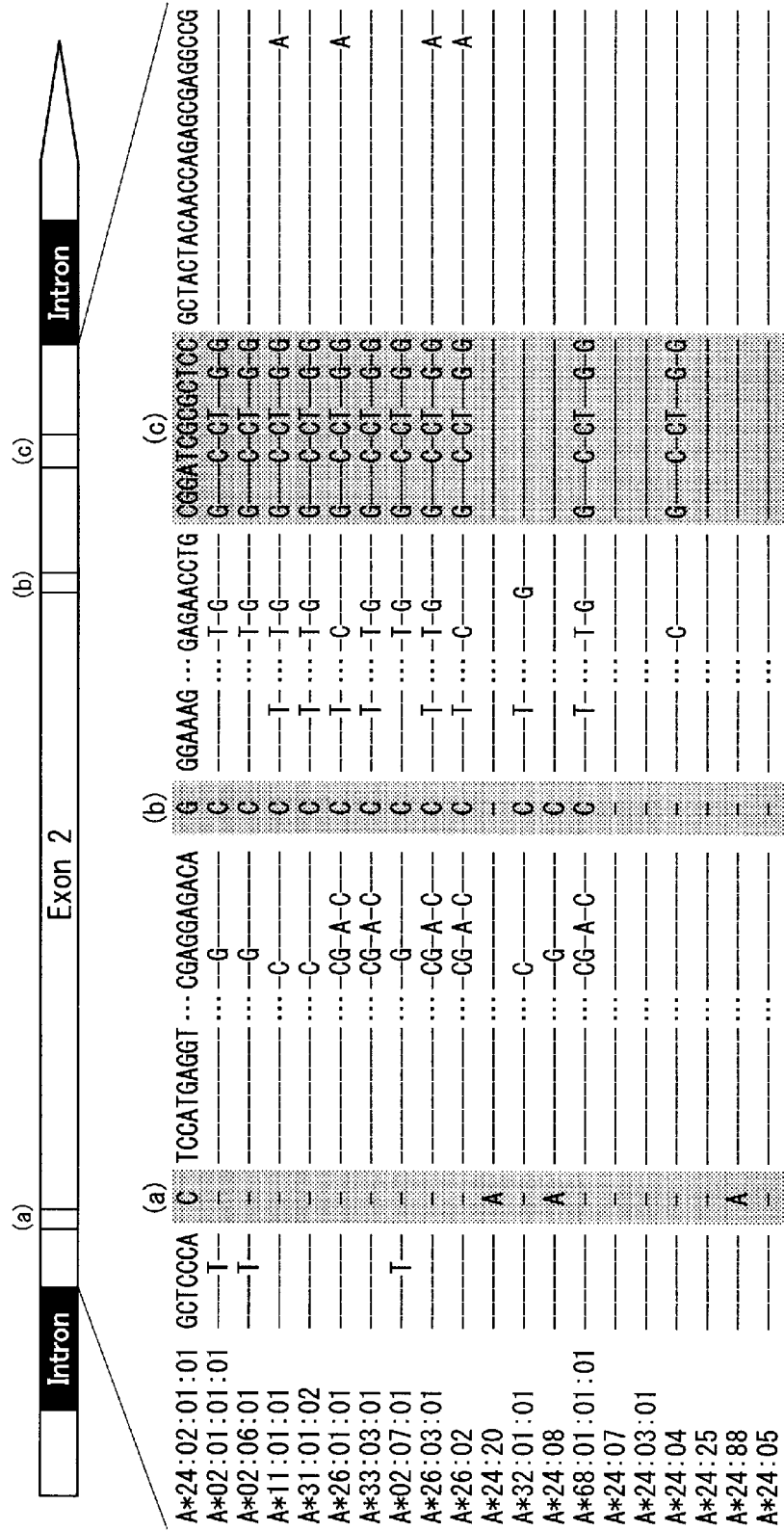
[図1D]

[1D]

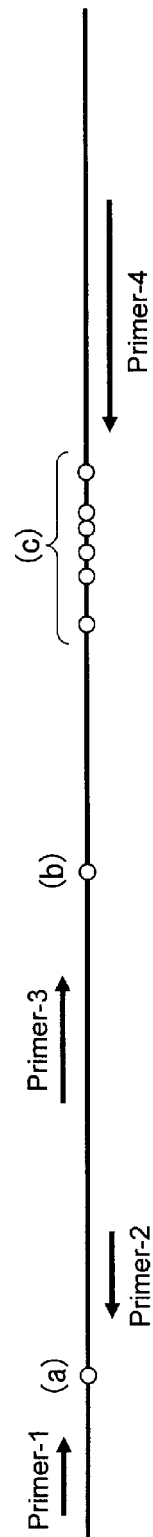
2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
CACACATTTC	TGGAACCTTC	TCTGGGCTCC	AAGACTAGGA	GCTTCCTCTA	GGACCTTAAG	GCCCTGGGTC	CTTCTGGTA	TCTCACAGGA	CATTTCCTTC
2510	2520	2530	2540	2550	2560	2570	2580	2590	2600
CCACAG	ATAG AAAAGGAGGG	AGCTACTCTC AGGCTGCAA	G	TAAGTATGAA	GGAGGCTGAT	GCCTGAGGTC	CTTGGGATAT	TGTGTTTGGG	AGCCCATGGG
2610	2620	2630	2640	2650	2660	2670	2680	2690	2700
GGAGCTCAAC	CACCCACAA	TTCTCTCTCT	AGCCACATCT	TCTGTGGAT	CTGACCAGGT	TCTGTTTTTG	TTCTACCCCA	G	GCAGTGACA GTGCCCAGGG
2710	2720	2730	2740	2750	2760	2770	2780	2790	2800
CTCTGATGTG	TCTCTCACAG	CTTGTAAG	G	TGAGAGCTTG	TGTGTGTGG	GTGTTGGGCG	GAACAGTGGA	CACAGCTGTG	CTATGGGGTT
2810	2820	2830	2840	2850	2860	2870	2880	2890	2900
TCTTTGCAIT	GGATGTATTG	AGCATGCGAT	GGGCTGTTTA	AAGTGTGACC	CCTCACTGTG	ACAGATATGA	AGTGTTCAT	GAATTTTTTT	TCTATAG TGT
2910	2920	2930	2940	2950	2960	2970	2980	2990	3000
GA	GACAGCTG	CCTTGTGTGG	GACTGAGAGG	CAACAGTTGT	CCCTTTGTGA	CTTGAAGAAC	CCTGACTTTG	TTTCTGCAAA	GGCACCTGCA
3010	3020	3030	3040	3050	3060	3070	3080	3090	3100
TGTGTCTGTG	TTCAATGAGG	CATAATGTA	GGAGGTGGG	AGACCACCCC	ACCCCAATGT	CCACCATGAC	CCTCTTCCCA	CGCTGACCTG	TGCTCCCTCC
3110	3120	3130	3140	3150	3160	3170	3180	3190	3200
CCAATCATCT	TTCTGTGTGC	AGACAGGTGG	GGCTGAGGTG	TCTCCATCTC	TGTCTCAACT	TCATGGTGCA	CTGAGCTGTA	ACTTCTTCTT	TCCTATTTAA

AA

[図2]



[図3]



[図4]

