

Sequence	Remarks	Accession Number Genbank
Sequences of Aotus MHC-DRB (molecular phylogenetic analysis exon 2)		
<p>Aoaz-DRB*W3801 Aoaz-DRB3*0601 Aona-DRB*W1301 Aona-DRB*W1305 Aona-DRB*W1306 Aona-DRB*W1309 Aona-DRB*W1312 Aona-DRB*W1801 Aona-DRB*W1802 Aona-DRB*W2901 Aona-DRB*W2906 Aona-DRB*W2907 Aona-DRB*W3001 Aona-DRB*W3801 Aona-DRB*W4201 Aona-DRB*W4401 Aona-DRB*W4501 Aona-DRB*W4701 Aona-DRB*W4702 Aona-DRB*W470404 Aona-DRB1*0301 Aona-DRB1*0302 Aona-DRB1*0303 Aona-DRB1*0305 Aona-DRB1*0307 Aona-DRB1*0313 Aona-DRB1*0314 Aona-DRB1*0319 Aona-DRB1*0324 Aona-DRB3*0601 Aona-DRB3*0602 Aona-DRB3*0603 Aona-DRB3*0614 Aoni-DRB*W1301 Aoni-DRB*W1303 Aoni-DRB*W2901 Aoni-DRB*W2902 Aoni-DRB*W3801 Aoni-DRB*W4201 Aoni-DRB*W4301 Aoni-DRB*W4401 Aoni-DRB1*0301 Aoni-DRB1*0304 Aoni-DRB1*0307 Aoni-DRB1*W1801 Aoni-DRB3*0601 Aotr-DRB*W1801 Aotr-DRB1*0301 Aotr-DRB1*0303 Aotr-DRB3*0602 Aotr-DRB3*0603 Aotr-DRB3*06 Aoovo-DRB*W130101 Aoovo-DRB*W1303 Aoovo-DRB*W4301 Aoovo-DRB*W4701 Aoovo-DRB1*0301</p>	<p>Aotus azarai MHC class II antigen (Aoaz-DRB) gene Aoaz-DRB*W3801 allele Aotus azarai MHC class II antigen (Aoaz-DRB3) gene Aoaz-DRB3*0601 allele Aotus nancymaae MHC class II antigen beta chain (Aona-DRB) gene Aona-DRB*W1301 allele Aotus nancymaae isolate 20896_2 MHC class II antigen beta chain (DRB) mRNA DRB*W1305 allele Aotus nancymaae isolate 21100_1 MHC class II antigen beta chain (DRB) mRNA DRB*W1306 allele Aotus nancymaae isolate 22417-7 MHC class II antigen beta chain (DRB) mRNA DRB*W1309 allele Aotus nancymaae MHC class II antigen (DRB) mRNA DRB*W1312 allele Aotus nancymaae MHC class II antigen beta chain (Aona-DRB) gene Aona-DRB*W1801 allele Aotus nancymaae MHC-DRB (DRB*W) mRNA DRB*W1802 allele Aotus nancymaae MHC class II antigen beta chain (Aona-DRB) gene Aona-DRB*W2901 allele Aotus nancymaae MHC class II antigen (DRB) mRNA DRB*W2906 allele Aotus nancymaae isolate 20894_3 MHC class II antigen beta chain (DRB) mRNA DRB*W2907 allele Aotus nancymaae MHC class II antigen beta chain (Aona-DRB) gene Aona-DRB*W3001 allele Aotus nancymaae isolate 16606_7 MHC class II antigen beta chain (DRB) mRNA DRB*W3801 allele Aotus nancymaae isolate 20337_3 MHC class II antigen beta chain (DRB) mRNA DRB*W4201 allele Aotus nancymaae isolate 20559_2 MHC class II antigen beta chain (DRB) mRNA DRB*W4401 allele Aotus nancymaae isolate 20249_12 MHC class II antigen beta chain (DRB) mRNA DRB*W4501 allele Aotus nancymaae isolate 20465_3 MHC class II antigen beta chain (DRB) mRNA DRB*W4701 allele Aotus nancymaae isolate 22822_13 MHC class II antigen beta chain (DRB) mRNA DRB*W4702 allele Aotus nancymaae MHC class II antigen (DRB) mRNA DRB*W470404 allele Aotus nancymaae MHC class II antigen beta chain (Aona-DRB1) gene Aona-DRB1*0301 allele Aotus nancymaae MHC class II antigen beta chain (Aona-DRB1) gene Aona-DRB1*0302 allele Aotus nancymaae MHC class II antigen beta chain (Aona-DRB1) gene Aona-DRB1*0303 allele Aotus nancymaae MHC class II antigen beta chain (Aona-DRB1) gene Aona-DRB1*0305 allele Aotus nancymaae MHC class II antigen beta chain (Aona-DRB1) gene Aona-DRB1*0307 allele Aotus nancymaae MHC class II antigen beta chain (Aona-DRB1) gene Aona-DRB1*0313 allele Aotus nancymaae MHC class II antigen beta chain (Aona-DRB1) gene Aona-DRB1*0314 allele Aotus nancymaae isolate 20719_2 MHC class II antigen beta chain (DRB1) mRNA DRB1*0319 allele Aotus nancymaae isolate 21955_10 MHC class II antigen beta chain (DRB1) mRNA DRB1*0324 allele Aotus nancymaae MHC class II antigen beta chain (Aona-DRB3) gene Aona-DRB3*0601 allele Aotus nancymaae MHC class II antigen beta chain (Aona-DRB3) gene Aona-DRB3*0602 allele Aotus nancymaae MHC class II antigen beta chain (Aona-DRB3) gene Aona-DRB3*0603 allele Aotus nancymaae isolate 20444_7 MHC class II antigen beta chain (DRB3) mRNA DRB3*0614 allele Aotus nigriceps isolate 21921_5 MHC class II antigen beta chain (DRB) mRNA DRB*W1301 allele Aotus nigriceps MHC class II antigen (DRB) mRNA DRB*W1303 allele Aotus nigriceps isolate 20596_8 MHC class II antigen beta chain (DRB) mRNA DRB*W2901 allele Aotus nigriceps isolate 21919_18 MHC class II antigen beta chain (DRB) mRNA DRB*W2902 allele Aotus nigriceps isolate 16584_5 MHC class II antigen beta chain (DRB) mRNA DRB*W3801 allele Aotus nigriceps isolate 20483_1 MHC class II antigen beta chain (DRB) mRNA DRB*W4201 allele Aotus nigriceps isolate 20848_16 MHC class II antigen beta chain (DRB) mRNA DRB*W4301 allele Aotus nigriceps isolate 20596_4 MHC class II antigen beta chain (DRB) mRNA DRB*W4401 allele Aotus nigriceps MHC class II antigen beta chain (Aoni-DRB1) gene Aoni-DRB1*0301 allele Aotus nigriceps isolate 21791_15 MHC class II antigen beta chain (DRB1) mRNA DRB1*0304 allele Aotus nigriceps MHC class II antigen (DRB1) mRNA DRB1*0307 allele Aotus nigriceps isolate 20456_8 MHC class II antigen beta chain (DRB1) mRNA DRB1*W1801 allele Aotus nigriceps isolate 20506_2 MHC class II antigen beta chain (DRB3) mRNA DRB3*0601 allele Aotus trivirgatus MHC class II DRB*W1801 gene exon Aotus trivirgatus MHC class II DRB1*0301 gene exon Aotus trivirgatus partial DRB1 gene for MHC class II antigen DRB1*0303 allele exon 2 Aotus trivirgatus partial DRB3 gene for MHC class II antigen DRB3*0602 allele exon 2 Aotus trivirgatus partial DRB3 gene for MHC class II antigen DRB3*0603 allele exon 2 Aotus trivirgatus MHC class II DRB gene exon Aotus vociferans MHC class II antigen (DRB) mRNA DRB*W130101 allele Aotus vociferans isolate 20789_1 MHC class II antigen beta chain (DRB) mRNA DRB*W1303 allele Aotus vociferans MHC class II antigen (DRB) mRNA DRB*W4301 allele Aotus vociferans isolate 16704_9 MHC class II antigen beta chain (DRB) mRNA DRB*W4701 allele Aotus vociferans MHC class II antigen (DRB1) mRNA DRB1*0301 allele</p>	<p>AY429143 AY429142 AF132767 AY563223 AY563218 AY563255 DQ162705 AF132768 AF169487 AF129806 DQ162688 AY563201 AF132766 AY563194 AY563209 AY563206 AY563180 AY563181 AY563183 DQ162645 AF129793 AF129792 AF129794 AF129796 AF129798 AF132760 AF132761 AY563188 AY563193 AF129799 AF129800 AF129801 AY563212 AY563261 DQ162732 AY563259 AY563246 AY563245 AY563253 AY563249 AY563247 AF129797 AY563242 DQ162711 AY563257 AY563229 L12477 L12472 AJ544176 AJ544174 AJ544175 L12474 DQ162634 AY563258 DQ162630 AY563227 DQ162628</p>

Sequence	Remarks	Accession Number Genbank
Sequences of primates MHC-DRB (molecular phylogenetic analysis exon 2 + intron 2)		
Caja_DRB_G_01 Caja_DRB_G_02 Caja_DRB_G_03 Caja_DRB_G_04 Caja_DRB_G_05 Caja_DRB_G_06 SAOE-DRB1*0303 SAOE-DRB3*0501 SAOE-DRB11*0102 SAOE-DRB11*0105 SAOE-DRB*W2209 CAJA-DRB1*0304 CAMO-DRB1*0302 CAMO-DRB3*0503 CAMO-DRB3*0504 CEAP-DRB*W1301 CAJA-DRB*W1201	43380-44258 Callithrix jacchus BAC clone CH259-77F15 from chromosome unknown, complete sequence 105908-107178 Callithrix jacchus BAC clone CH259-77F15 from chromosome unknown, complete sequence 192613-193403 Callithrix jacchus BAC clone CH259-77F15 from chromosome unknown, complete sequence 138963-138357 Callithrix jacchus BAC clone CH259-1507 from chromosome unknown, complete sequence 76772-75338 Callithrix jacchus BAC clone CH259-1507 from chromosome unknown, complete sequence 161835-162584 Callithrix jacchus BAC clone CH259-49P2 from chromosome unknown, complete sequence Saguinus oedipus MHC class II antigen (SAOE-DRB1) pseudogene Saguinus oedipus MHC class II antigen (SAOE-DRB3) pseudogene Saguinus oedipus MHC class II antigen (SAOE-DRB11) gene Saguinus oedipus MHC class II antigen (SAOE-DRB11) gene Saguinus oedipus MHC class II antigen (SAOE-DRB) gene Callithrix jacchus MHC class II antigen (CAJA-DRB1) gene Callicebus moloch MHC class II antigen (CAMO-DRB1) gene Callicebus moloch MHC class II antigen (CAMO-DRB3) gene Callicebus moloch MHC class II antigen (CAMO-DRB3) pseudogene Cebus apella MHC class II antigen (CEAP-DRB) gene Callithrix jacchus MHC class II antigen (CAJA-DRB) gene	AC242730 AC242730 AC242730 AC243457 AC243457 AC242576 AF173332 AF173333 AF173334 AF173335 AF173336 AF173337 AF173338 AF173339 AF173340 AF173341 AF173348
Mamu_DRB_G_01 Mamu_DRB_G_02 Mamu_DRB_G_03ps Mamu_DRB_G_05 Mamu_DRB_G_06 Mamu_DRB_G_07 Mamu_DRB_G_08 Mamu_DRB_G_04 Chae_DRB_G_01 Chae_DRB_G_02 Chae_DRB_G_03 Chae_DRB_G_04 MAFA-DRB*W3301 MAAR-DRB1*0301 MAAR-DRB1*0302 MAAR-DRB1*0701 MAFA-DRB*W301 MAMU-DRB*W402 MAAR-DRB*W601 MAAR-DRB5*0301 MAMU-DRB6*0106 Mamu-DRB*W201 Mamu-DRB*W305 Mamu-DRB*W603 Mamu-DRB*W2507 Mamu-DRB1*0303 Mamu-DRB1*0306 Mamu-DRB1*0309 Mamu-DRB1*0404 Mamu-DRB1*1007 Mamu-DRB3*0405 Mamu-DRB3*0408 Mamu-DRB5*0301	140068-140822 Macaca mulatta Major Histocompatibility Complex BAC MMU012K22 28917-29606 Macaca mulatta Major Histocompatibility Complex BAC MMU012K22 111593-112214 Macaca mulatta Major Histocompatibility Complex BAC MMU012K22 c75283-74620 Macaca mulatta Major Histocompatibility Complex BAC MMU248N17 c151148-150454 Macaca mulatta Major Histocompatibility Complex BAC MMU248N17 c29018-28359 Macaca mulatta Major Histocompatibility Complex BAC MMU248N17 c26068-25409 Macaca mulatta Major Histocompatibility Complex BAC MMU281E18 173697-174407 Macaca mulatta Major Histocompatibility Complex BAC MMU370O02 63309-64000 Chlorocebus aethiops BAC clone CH252-249I23 from chromosome 6 143590-144262 Chlorocebus aethiops BAC clone CH252-249I23 from chromosome 6 111557-112224 Chlorocebus aethiops BAC clone CH252-249I23 from chromosome 6 21256-21901 Chlorocebus aethiops BAC clone CH252-249I23 from chromosome 6 Macaca fascicularis MHC class II antigen (MAFA-DRB) gene Macaca arctoides MHC class II antigen (MAAR-DRB1) gene Macaca arctoides MHC class II antigen (MAAR-DRB1) gene Macaca arctoides MHC class II antigen (MAAR-DRB1) gene Macaca fascicularis MHC class II antigen (MAFA-DRB) gene Macaca mulatta MHC class II antigen (MAMU-DRB) gene Macaca arctoides MHC class II antigen (MAAR-DRB) pseudogene Macaca arctoides MHC class II antigen (MAAR-DRB5) gene Macaca mulatta MHC class II antigen (MAMU-DRB6) pseudogene 7681-8413 Macaca mulatta partial Mamu-DRB gene for MHC class II antigen 7704-8400 Macaca mulatta partial Mamu-DRB gene for MHC class II antigen 6501-7247 Macaca mulatta partial Mamu-DRB gene for MHC class II antigen 6540-7190 Macaca mulatta partial Mamu-DRB gene for MHC class II antigen 3087-3748 Macaca mulatta partial Mamu-DRB gene for MHC class II antigen Macaca mulatta partial Mamu-DRB1 gene for MHC class II antigen 7622-8327 Macaca mulatta partial Mamu-DRB1 gene for MHC class II antigen 2994-3688 Macaca mulatta partial Mamu-DRB1 gene for MHC class II antigen 8014-8684 Macaca mulatta partial Mamu-DRB1 gene for MHC class II antigen Macaca mulatta partial Mamu-DRB3 gene for MHC class II antigen 2995-3667 Macaca mulatta partial Mamu-DRB3 gene for MHC class II antigen 976-8612 Macaca mulatta partial Mamu-DRB5 gene for MHC class II antigen	AC148663 AC148663 AC148663 AC148697 AC148697 AC148697 AC148700 AC148706 AC241608 AC241608 AC241608 AC241608 AF173349 AF173350 AF173351 AF173352 AF173353 AF173354 AF173355 AF173356 AF173357 AM910410 AM910411 AM910412 AM910413 AM910414 AM910415 AM910417 AM910419 AM910420 AM910421 AM910422 AM910423

Sequence	Remarks	Accession Number Genbank
Sequences of primates MHC-DRB (molecular phylogenetic analysis exon 2 + intron 2)		
HLA_DRB1*010101 HLA_DRB1*010201 HLA_DRB1*040101 HLA_DRB1*0405 HLA_DRB1*070101 HLA_DRB1*08:03:02 HLA_DRB1*110101 HLA_DRB1*110401 HLA_DRB1*12:01:01 HLA_DRB1*130201 HLA_DRB1*140101 HLA_DRB1*140501 HLA_DRB1*1501 HLA_DRB1*16 HLA_DRB1*1602 HLA_DRB3*01012 HLA_DRB3*020201 HLA_DRB4*01030101 HLA_DRB5*0101 HLA_DRB6ps HLA_DRB7ps HLA_DRB1*10:01:01 HLA_DRB1*15:02:01 HLA_DRB1*03-AL929581	Homo sapiens HLA-DRB1 gene for MHC class II antigen Homo sapiens voucher Coriell Cell Repository DNA sample NA01018 Homo sapiens major histocompatibility complex, class II, DR53 haplotype (DR53) Homo sapiens MHC class II antigen (HLA-DRB1) gene, HLA-DRB1*0404 Human DNA sequence from clone DADB-102D14 on chromosome 6 Homo sapiens HLA-DRB1 gene for MHC class II antigen Homo sapiens voucher Coriell Cell Repository DNA sample NA00576 Homo sapiens voucher Coriell Cell Repository DNA sample NA14661 Homo sapiens HLA-DRB1 gene for major histocompatibility complex Homo sapiens voucher Coriell Cell Repository DNA sample NA14663 Homo sapiens voucher Coriell Cell Repository DNA sample NA10540 Homo sapiens voucher Coriell Cell Repository DNA sample NA04535 Homo sapiens major histocompatibility complex, class II, DR51 haplotype (DR51) on chromosome 6 Homo sapiens major histocompatibility complex, class II Homo sapiens MHC class II antigen (HLA-DRB1) gene DR51 Homo sapiens major histocompatibility complex, class II, DR52 haplotype (DR52) on chromosome 6 Human DNA sequence from clone DAQB-97F8 on chromosome 6 Homo sapiens major histocompatibility complex, class II, DR53 haplotype (DR53) Homo sapiens major histocompatibility complex, class II, DR51 haplotype (DR51) on chromosome 6 Homo sapiens major histocompatibility complex, class II, DR51 haplotype (DR51) on chromosome 6 Homo sapiens major histocompatibility complex, class II, DR53 haplotype (DR53) Homo sapiens MHC class II antigen (HLA-DRB1) gene Homo sapiens HLA-DRB1 gene for MHC class II antigen c91958-91273 Human DNA sequence from clone DAQB-97F8 on chromosome 6	AM493435 AY663400 NG_002433 AB715390 CR753309 FN823238 AY663412 AY663394 AB715399 AY663413 AY663405 AY663408 NG_002432 NG_002432 AB774985 NG_002392 AL929581 NG_002433 NG_002432 NG_002432 NG_002432 NG_002433 JN157606 AB774991 AL929581
Patr-DRB1*020101 Patr-DRB3*0208 Patr-DRB1*10:01 Gogo_DRB_01 Patr-DRB*W902 Patr-DRB3*01020101 Patr_DRB_01 Gogo_DRB_02 Gogo_DRB_03 Gogo_DRB_04 Gogo_DRB_05 Patr-DRB4*02:01 Poab_DRB_01 Patr_DRB_01	Pan troglodytes partial Patr-DRB1 gene for MHC class II antigen, Patr-DRB1*020101 Pan troglodytes partial Patr-DRB3 gene for MHC class II antigen Pan troglodytes versus partial patr-DRB1 gene for MHC class II antigen 44822-45507 Gorilla gorilla voucher Coriell Cell Repository DNA sample NG05251 Pan troglodytes partial Patr-DRB gene for MHC class II antigen Pan troglodytes partial Patr-DRB3 gene for MHC class II antigen Pan troglodytes voucher Coriell Cell Repository DNA sample NS03646 c218276-217597 Gorilla DNA sequence from clone CH255-114D6, complete sequence c218276-217597 Gorilla DNA sequence from clone CH255-114D6, complete sequence 73853067:151462-152106 Gorilla DNA sequence from clone CH255-351B13 73853067:151462-152106 Gorilla DNA sequence from clone CH255-351B13 5938-6579 Pan troglodytes troglodytes partial patr-DRB4 200269-200926 Pongo abelii BAC clone CH276-191M9 from chromosome 6 27628-28281 Pan troglodytes genomic DNA, chromosome 5	AM910425 AM910428 HE800526 AY663402 AM910424 AM910426 AY663401 CU104652 CU104652 CT025711 CT025711 CT025711 HE800525 AC206450 AP006503

Table S2. Microsatellite sequence and length in Platyrhini MHC-DRB.

SEQUENCE	MICROSATELLITE			LENGTH	
	FIRST PART	CENTRAL PART	FINAL PART		LZSize (Bytes)
Aona DRB3*062501	CA(GA)4CT(GA)4CT(GA)4C C	(GA)5CACA(GA)2CACT(GA)4CA(GA)6CT(GA)4CAGT((GA)3,3,4CT)(GA)4CACT(GA)4CACAGT(GA)2CA(GA)2AACA(GA)2AAGACT(GA)3TACACT(GA)4CA(GA)2CT(GA)3CA(GA)3CACA(GA)3CA(GA)3CTGAAAGACT(GA)4CA((GA)3,4CT)(GA)3AAGACT((GA)4,3CT)(GA)3AACA((GA)2,3CT)(GA)3CACT(GA)3CT(GA)3CACAGATA(GA)2TT((GA)3,5CT)(GA)3CACTGATA((GA)2,5,3CT)	(GA)15C T(GA)3G CGCCTT G	314	4333
Aovo DRB3*0601	CA(GA)4CT(GA)4CT(GA)4C C	(GA)5(CA)2(GA)2CACT(GA)4CAGAG(GA)4CT(GA)4CAGT((GA)3,3,4CT)(GA)4CACT(GA)4CACAGT(GA)2CA(GA)2AACA(GA)2AAGACT(GA)3TACACT(GA)4CA(GA)2CT(GA)3CA(GA)3CACA(GA)3CA(GA)3CTGAAAGACT(GA)4CA((GA)3,4CT)(GA)3AAGACT((GA)4,3)(GA)3AACA((GA)2,3CT)(GA)3CACT(GA)3CT(GA)3CACAGATA(GA)2TT((GA)3,5CT)(GA)3CACTGATA((GA)2,5,3CT)	(GA)15C T(GA)3G CGCCTT G	310	4343
Aona DRB3*062502	CA(GA)4CT(GA)4CC(GA)4C C	(GA)5CACA(GA)2CACT(GA)4CA(GA)6CT(GA)4CAGT((GA)3,3,4CT)(GA)4CACT(GA)4CACAGT(GA)2CA(GA)2AACA(GA)2AAGACT(GA)3TACACT(GA)4CA(GA)2CT((GA)3,3CA)(GA)3CA(GA)3CTGAAAGACT(GA)4CA((GA)3,4CT)GA AAGACT((GA)4,3CT)(GA)3AACA((GA)2,3CT)(GA)3CACT(GA)3CT(GA)3CACAGATA(GA)2TT((GA)3,5CT)(GA)3CACTGATA(GA)2CT	(GA)16C T(GA)3G CGCCTT G	294	4310
Aona DRB3*0626	CA(GA)4CT(GA)4CT(GA)4C C	(GA)5CACA(GA)2CACT(GA)4CA(GA)5CT(GA)4CAGT((GA)3,3,4CT)(GA)4CACT(GA)4CACAGT(GA)2CA(GA)2AACA(GA)2AAGACT(GA)3TACACT(GA)4CA(GA)2CT((GA)3,3CA)(GA)3CA(GA)3CTGAAAGACT(GA)4CA((GA)3,4CT)(GA)3AAGACT((GA)4,3CT)(GA)3AACA((GA)2,3CT)(GA)3CACT(GA)3CT(GA)3CACAGATA(GA)2TT((GA)3,5CT)(GA)3CACTGATA((GA)2,5,3CT)	(GA)15C T(GA)3G CGCCTT G	312	4357
Aona DRB3*0628	CA(GA)4CT(GA)4CT(GA)4C C	(GA)5CACA(GA)2CACT(GA)4CA(GA)6CT(GA)4CAGT((GA)3,3,4CT)(GA)4CACT(GA)4CAGAG((GA)2,3CA)(GA)2AAGACT(GA)3CA(GA)2CT(GA)3TACACT(GA)4CA(GA)2CT((GA)3,3CA)CT(GA)4CA(GA)3CTGAAAGACT(GA)4CA((GA)4,5,3CT)(GA)3TACTTAGG(GA)2CT(GA)4CA(GA)3CT(GA)3AAGACT((GA)4,3,3CT)(GA)3AACA((GA)2,3CT)(GA)3CACT(GA)3CT(GA)3CACAGATA(GA)2TT((GA)3,5CT)(GA)3CACTGATA((GA)5,3)	(GA)11A ACT(GA) 3GCAC TTG	346	4855
Aona DRB3*0627	CA(GA)4CT(GA)4CT(GA)4C C	(GA)5CACA(GA)2CACT(GA)4CA(GA)6CT(GA)4CAGT((GA)3,3,4CT)(GA)4CACT(GA)4CAGAG((GA)2,3CA)(GA)2AAGACT(GA)3CA(GA)4CT(GA)3TACACT(GA)4CA(GA)2CT((GA)3,3CA)CT(GA)4CA(GA)3CTGAAAGACT(GA)4CA(GA)4CT(GA)4GGCT(GA)3CT(GA)3TACTTAGG(GA)2CT(GA)4CA(GA)3CT(GA)3AAGACT((GA)4,3,3CT)(GA)3AACA((GA)2,3CT)(GA)3CACT(GA)3CT(GA)3CACAGATA(GA)2TT((GA)3,5CT)(GA)3CACTGATA((GA)2,5,3CT)	(GA)10A ACT(GA) 3GCAC TTG	350	4951
Aona DRB3*0615	CA(GA)4CT(GA)4CT(GA)4C C	(GA)5CACA(GA)2CACT(GA)4CA(GA)6CT(GA)4CAGT((GA)3,3,4CT)(GA)4CACT(GA)4CACAGT(GA)2CA(GA)2AACA(GA)2AAGACT(GA)3TACACT(GA)4CA(GA)2CT((GA)3,3CA)(GA)3CA(GA)3CTGAAAGACT(GA)4CA((GA)3,4CT)(GA)3AAGACT((GA)4,3CT)(GA)3AACA((GA)2,3CT)(GA)3CACT(GA)3CT(GA)3CACAGATA(GA)2TT((GA)3,5CT)(GA)3CACTGATA((GA)2,5,3CT)	(GA)15C T(GA)3G CGCCTT G	314	4333
Aona DRB1*0329GA	CA(GA)4CTGAAA(GA)2CT(GA)4CACTGAGT	(GA)2GT((GA)2,3CA)(GA)2AAGACT(GACA)2(GA)4CT(GA)2GGTACACT(GA)4CAGAGT((GA)2,3CA)GAGTAAGACTGACA(GA)4CT(GA)3TACACT(GA)4CA(GA)2CT((GA)3,3CA)CT(GA)4CA(GA)3CTGAAAGACT(GA)4CA((GA)4,5,3CT)(GA)3TACTTAGG(GA)2CT(GA)4CA(GA)3CT(GA)2CAGACT(GA)3AAGACT(GA)6CT(GA)3GGCT(GA)5CTGAGG(GA)2CA(GA)2AT(GA)5CT(GA)3CAAGACA(GA)2CT(GA)4T(GA)2CA((GA)4,4CT)AA(GA)3CTGAGG((GA)2,4CT)GAAAGACT(GA)5CT(GA)4CAAGACA(GA)2CT(GA)4T(GA)2CA(GA)4CT(GA)3AAGACT(GA)3CA((GA)2,3,2CT)(GA)3AATAGACT(GA)3CT(GA)3CACT(GA)3CT(GA)3CACAGATA(GA)2TT((GA)3,5CT)(GA)3CACTGATA((GA)3,5,3CT)	(GA)23C T(GA)3G CGCCG TG	446	7249
Aona DRB1*031701	CA(GA)4CT(GA)4CTACT	(GA)4GT((GA)2,3CA)(GA)2AAGACTGACAGACA(GA)4CT(GA)2GGTACACT(GA)4CAGAGT((GA)2,3CA)GAGTAAGACTGACA(GA)4CT(GA)3TACACT(GA)4CA(GA)2CT(GA)3CAGC(GA)2CACT(GA)4CA(GA)3CTGAAAGACT(GA)4CA((GA)4,5,3CT)(GA)3TACTTAGG(GA)2CT(GA)4CA(GA)3CT(GA)2CAGACT(GA)3AAGACT(GA)6CT(GA)3GGCT(GA)5CTGAGG(GA)2CC(GA)2AT(GA)5CT(GA)3CAAGACA(GA)2CT(GA)4T(GA)2CA((GA)4,4CT)AA(GA)3CTGAGG((GA)2,4CT)GA AAGACT(GA)5CT(GA)4CAAGACA(GA)2CT(GA)4T(GA)2CA(GA)4CT(GA)3AAGACT(GA)3CA((GA)2,3,2CT)(GA)3AATAGACT(GA)3CT(GA)3CACT(GA)3CT(GA)3CACAGATA(GA)2TT((GA)3,5CT)(GA)3CACTGATA((GA)2,5,3CT)	(GA)25C T(GA)3G CGCCG TG	462	7205

Aovo DRB1*0304	CA(GA)4CT(GA)4CC(GA)5CACA	(GA)2CACT(GA)4CA(GA)6CT(GA)4CAGT((GA)3,3CT)(GA)4CACT(GA)4CAGAGT(GA)2CA(GA)2AACA(GA)2AAGACT(GA)3TACACT(GA)4CA(GA)2CT((GA)3,3CA)CT(GA)4CA(GA)3CTGAAAGACT(GA)4CA(GA)3CT(GA)3AAGACT((GA)4,3CT)(GA)3AACA((GA)2,3CT)(GA)3CACT(GA)3CT(GA)3CACAGATA(GA)2TT(GA)3CT(GA)4CACTGATA((GA)2,4,3CT)	(GA)11A ACT(GA)3GCAC TTG	274	3949
Aovo DRB1*0305	CA(GA)4CT(GA)4CC(GA)5CACA	(GA)2CACT(GA)4CA(GA)6CT(GA)4CAGT((GA)3,3,2CT)(GA)4CACT(GA)4CAGAGG((GA)2,3CA)(GA)2AAGACT(GA)3CA(GA)3CT(GA)3TACACT(GA)4CA(GA)2CT(GA)3CAGG(GA)2CACT(GA)4CA(GA)3CTGAAAGACT(GA)4CA(GA)4CT((GA)5,3CT)(GA)3TACTTAGG(GA)2CT (GA)4CA(GA)3CT(GA)3AAGACTCT(GA)4CT(GA)3AACAGGGACT(GA)3CT(GA)3CACT(GA)3CT(GA)3CACAGATAGA AATT(GA)3CT(GA)3CACTGATA ((GA)2,5,3CT)(GA)3CA(GA)2CT	(GA)9A ACT(GA)3GCAC TTG	336	4282
Aovo DRB1*0306	CA(GA)4CT(GA)4CC(GA)5CACA	(GA)2CACT(GA)4CA(GA)6CT(GA)4CAGT((GA)3,3CT)(GA)4CT(GA)4CACT(GA)4CAGAGT(GA)2CA(GA)2AACA(GA)2AAGACT(GA)2AATACACT(GA)4CA(GA)2CT((GA)3,3CA)CT(GA)4CA(GA)3CTGAAAGACT(GA)4CA(GA)3CT(GA)3AAGACT((GA)4,3CT)(GA)3AACA((GA)2,3CT)(GA)3CACT(GA)3CT(GA)3CACAGATA(GA)2TT(GA)3CT(GA)3CACTGATA((GA)2,4,3CT)	(GA)13A ACT(GA)3GCAC TTG	282	4102
Aovo DRB1*0307	CA(GA)4CT(GA)4CC(GA)7CACA	(GA)2CACT(GA)4CA(GA)6CT(GA)4CAGT((GA)3,3,4CT)(GA)4CACT(GA)4CAGAGT(GA)2CA(GA)2AACA(GA)2AAGACT(GA)2AATACACT(GA)4CA(GA)2CT((GA)3,3CA)CT(GA)4CA(GA)3CTGAAAGACT(GA)4CA(GA)3CT(GA)3AAGACT((GA)4,3CT)(GA)3AACA((GA)2,3CT)(GA)3CACT(GA)3CT(GA)3CACAGATA(GA)2TT(GA)3CT(GA)3CACTGATA((GA)2,4,3CT)	(GA)13A ACT(GA)3GCAC TTG	286	4096
Aona DRB*W8901	CA(GA)2CA(GA)2CT(GA)4CT	(GA)7AT((GA)4,5,4CT)(GA)3TA(GA)2CTGAAAGAC(GA)2CA(GA)3AACT(GA)3AACATA(GA)2CT(GA)5CACA	(GA)5CA GAGC (GA)4 GCG	114	1833
Aona DRB*W1808	CA(GA)5CT(GA)4CT(GA)10CACA	(GA)4TAGACA(GA)2CA((GA)3,3CT)GT((GA)4,4CT)GTGCAAGACC((GA)5,2CT)(GA)3TT(GA)4CA(GA)2CT(GA)3GGCT(GA)3CTCG(GA)3CTGAGC(GA)3CT(GA)2TAGACT(GA)3AACT(GA)3TACT	(GA)6 (GC)3 GA CAGCG	168	2893
Aona DRB*W1806	CA(GA)5CT(GA)4CT(GA)10CACA	(GA)4TAGACA(GA)2CA((GA)3,3CT)GT(GA)4CTGTGCAAGACC((GA)5,2CT)(GA)3TT(GA)4CA((GA)2,4CT)(GA)3CTCG(GA)3CTGAGC(GA)3CT(GA)2TAGACT(GA)3AACT(GA)3TACT	(GA)6 (GC)3GA CAGCG	162	2729
Aovo DRB*W1803	CA(GA)5CT(GA)15CACA	(GA)4TAGACA(GA)2CA((GA)3,3CT)GT(GA)4CT(GA)4CTGTGCAAGACC((GA)5,2,4CT)(GA)3CTCG(GA)3CTGAGC(GA)3CT(GA)2TAGACT(GA)3AACT(GA)3TACT	(GA)6 (GC)3GA CAGCG	154	2479
Aovo DRB*W1801	CA(GA)7CAC A	(GA)4TAGACA(GA)2CA((GA)3,3CT)GT((GA)4,4CT)GTGCAAGACC(GA)5TT(GA)2CT(GA)2TT(GA)4CA((GA)2,4CT)(GA)3CTCG(GA)3CTGAGC(GA)3CT(GA)2TAGACT(GA)3AACT(GA)3TACT	(GA)6 (GC)3GA CAGCG	144	2591
Aovo DRB*W1802	CA(GA)5CT(GA)4CT(GA)13CACA	(GA)4TAGACA((GA)2,3CT)GT(GA)4CTGTGCAAGACC((GA)5,2CT)(GA)3TT(GA)4CA((GA)2,4CT)(GA)3CTCG(GA)3CTGAGC(GA)3CT(GA)2TAGACT(GA)3AACA(GA)2TACT	(GA)6 (GC)3GA CAGCG	160	2663
Aona DRB1*0328	CA(GA)4CT(GA)4CT(GA)4C C	(GA)5CACA(GA)2CACT(GA)4CA(GA)6CT(GA)4CAGT((GA)3,3,2CT)(GA)4CACT(GA)4CAGAGT((GA)2,3CA)(GA)2AAGGCTGACAGACA (GA)4CT(GA)3TACACT(GA)4CA(GA)2CT(GA)3CAGACACTCAGACACT((GA)4,3CT)GT(GA)5CT(GA)4CA(GA)4CT(GA)4CACT(GA)4CA (GA)3CTGAAAGACT(GA)3TACTTAGG(GA)2CT(GA)3AACA((GA)3,4CT)(GA)3AAGACT(GA)5CT(GA)3GGCT(GA)3CTGAGG(GA)2CA(GA)2AT(GA)5CT(GA)3TAAGACA(GA)2CT(GA)4T(GA)2CA(GA)4CT(GA)3AAGACT(GA)3CA((GA)3,3CT)(GA)4CA((GA)2,3,3CT)(GA)3CACAGATA(GA)2TT((GA)3,5CT)GGGGGGG	(GA)11C T(GA)3G CACGT G	414	6113

Aovo DRB*W4501	CA(GA)2CA(GA)2CT(GA)4CT	(GA)3CAGACT(GA)5GT(GA)12G((GA)2,4CA)(GA)2GGCT(GA)3GCCA(GA)3CT(GA)2AAGACA	(GA)2GC CAGAG CCA(GA) 3GCA	98	1593
Aovo DRB*W8701	CA(GA)4CT	(GA)6CT(GA)5CT(GA)15CT	(GA)3GC GCGTG	66	734
Aona DRB*W2910	CA(GA)2CA(GA)2CT(GA)4CT	(GA)7AT((GA)4,5,4CT)(GA)3TA(GA)2CTGAAAGAC(GA)2CA(GA)3AACT(GA)3AACATA(GA)2CT(GA)5CACA	(GA)5CA GAGC (GA)4 GCG	114	1833
Aona DRB*W2908	CA(GA)2CA(GA)2CT(GA)4CT	(GA)7AT((GA)4,5,4CT)(GA)3TA(GA)2CTGAAAGAC(GA)2CA(GA)3AACT(GA)3AACATA(GA)2CT(GA)5CACA	(GA)5CA GAGC (GA)4 GCG	114	1833
Aovo DRB*W2901	CA(GA)2CA(GA)2CT(GA)4CT	(GA)7ATGAAA((GA)2,5,4CT)(GA)3TA(GA)2CTGAAAGAC(GA)2CA(GA)4CT(GA)3AACATA(GA)2CT(GA)5CACA	(GA)5CA GAGC (GA)4 GCG	112	1854
Aovo DRB*W9001	CA(GA)2CA(GA)2CT(GA)4CT	(GA)4AT((GA)4,4CT)(GA)3TA(GA)2CT(GA)3CAGACACA	(GA)5CA GAGC (GA)4 GCG	74	1182
Aovo DRB*W8801	CA(GA)4CA(GA)7CT(GA)7CT	(GA)7CT(GA)4AT((GA)4,5,4,6CT)(GA)6CTGAAAGAC(GA)2CA(GA)4CT(GA)3AACA(GA)3CT(GA)3GGGACACA	(GA)5CA GAGC (GA)4 GCG	156	1975
Aovo DRB*W8501	CA(GA)2CA(GA)3CC(GA)5CT	(GA)6CTGAAAGAC(GA)2CA(GA)4CT(GA)3GGGACACA	(GA)5CA GAGC (GA)4 GCG	68	1244
Aovo DRB*W8502	CA(GA)2CA(GA)3CC	(GA)3GCGACT((GA)4,6CT)(GA)6CTGAAAGAC(GA)2CA(GA)4CT(GA)3GGGACACA	(GA)5CA GAGC (GA)4 GCG	84	1477
Aona DRB*W8501	CA(GA)2CA(GA)3CC	((GA)5,4CT)GC((GA)5,6CT)GAAAGAC(GA)2CA(GA)4CT(GA)3GGGACACACACA	(GA)5CA GAGC (GA)4 GCG	90	1443
Aovo DRB*W8601	CA(GA)2CA(GA)2CA	(GA)10AA(GA)7AGACA(GA)14G((GA)2,4CA)((GA)3,3CT)(GA)2AAGACA(GA)3GCCA	(GA)2GC CAGAG CCA(GA) 3GCA	114	1528
Aovo DRB*W8602	CA(GA)2CA(GA)2CA	(GA)9AA(GA)7AGACA(GA)15G((GA)2,4CA)(GA)3CT(GA)2AAGACA(GA)3GCCA	(GA)2GC CAGAG CCA(GA) 2GCA	106	1513

Aovo DRB*W3001	CA(GA)2CA(GA)2CA	(GA)10AA(GA)7AGACA(GA)15G((GA)2,4CA)((GA)3,3CT)(GA)2AAGACA(GA)3GCCA	(GA)2GC CAGAG CCA(GA) 3GCA	116	1527
Aona DRB*W3002	CA(GA)2CA(GA)2CA(GA)9A A	(GA)11AA(GA)7AGACA(GA)9GTG((GA)2,4CA)(GA)3GCCA(GA)3CT(GA)2AAGACA	(GA)2GC CAGAG CCA(GA) 3GCA	118	1623
Caja- DRB03	CA(GA)3CA(GA)2TACA	(GA)4CT(GA)3GG(GA)2CA(GA)2CT(GA)4CA(GA)9CA(GA)2TACA(GA)4CT(GA)4CA(GA)2GC(GA)2GCCA(GA)3AA	(GA)3G GAAA(GA)30G GGCG	158	
Caja- DRB06	CA(GA)3CA(GA)2TACA	(GA)4CT(GA)4CA(GA)2GC(GA)2GC(GA)2GC(GA)2GCCA	(GA)7G GAAA(GA)37G GGCG	130	
Caja-DRB02	CA(GA)11CA(GA)9CA	(GA)10TTGACA(GA)2CA(GA)3CT(GA)3CGAGGCAAAGACT(GA)2CAGACGAGAAG(GA)4CA(GA)2TT(GA)3AAGACT(GA)3CA(GA)4CT(GA)2AACT(GA)4CA(GA)2CT(GA)2CACT(GA)3CT(GA)3CC(GA)4C(GA)2CA(GA)4TA(GA)2AAGACA(GA)4CT(GA)3CA(GA)2CAGACT(GA)4CT(GA)2CT(GA)4CTTA(GA)2CT(GA)3CTGAAAAGACT(GA)5CT(GA)3CACT(GA)4CT(GA)2GC(GA)2CA(GA)3CT(GA)5CCGAGG(GA)2CT(GA)2CAGAACT(GA)3CT(GA)2AAGACT(GA)3CTAA(GA)2TACT(GA)5CT(GA)2CACTGATA(GA)2CT(GA)4CA(GA)2CT(GA)4TA(GA)4CTGAGCGACTAA(GA)2CACT(GA)3CT(GA)2CACTCATA(GA)2CT(GA)3CT(GA)2GGGACT(GA)3CTGACAGACACTGATA(GA)2CTCA(GA)4CT(GA)3CACT(GA)4CT	(GA)2G CCAGA GTGAC ACT(GA) 16GGC	434	
Caja-DRB05	CA(GA)34CA(GA)13TTGACA	(GA)2CT(GA)3CT(GA)3CGAGGCAAAGACT(GA)2CAGAC(GA)2AG(GA)4CA(GA)2TT(GA)3AAGACT(GA)3CA(GA)4CT(GA)2AACT(GA)4CA(GA)2CT(GA)2CACT(GA)3CT(GA)3CTGAAAAGTAAGACT(GA)5CT(GA)2GT(GA)2CA(GA)3CA(GA)3GCCT(GA)3CAGACA(GA)2CA(GA)4CT(GA)2CT(GA)5TT(GA)4CT(GA)3CACT(GA)7CT(GA)3CC(GA)4C(GA)2CA(GA)3GATAAAGACA(GA)4CT(GA)3CA(GA)2CAGACT(GA)4CT(GA)2CT(GA)4CTTA(GA)2CT(GA)3CTGAAAAGACT(GA)3CACT(GA)4CT(GA)2GC(GA)2CA(GA)3CT(GA)5CCGAGG(GA)2CT(GA)2CAGAACT(GA)3CT(GA)4CT(GA)3CTAA(GA)2TACT(GA)5CT(GA)2CACTGATA(GA)2CT(GA)4CA(GA)2CT(GA)4TA(GA)4CT(GA)3CTAA(GA)2CACT(GA)3CT(GA)2CACTCATA(GA)2CT(GA)2GGGACT(GA)3CTGACAGACACTGATA(GA)2CTCA(GA)4CT(GA)3CACT(GA)4CT	(GA)2G CCAGA GTGAC ACT(GA) 15(GCG A)2GCG CAAGC G	554	
Caja-DRB01	(GA)16CA(GA)9CT(GACA)2CT	(GA)5CT(GA)3GTCTCA(GA)2CT(GA)4CA(GA)2CT(GA)3CTGT(GA)5CT(GA)4C(GA)2GG(GA)2(CAGA)2(GA)2AAGACT(GA)2CT(GA)5CT(GA)4CTGAAAAGACT(GA)3CT(GA)3CAAGACA(GA)2CT(GA)4TAAGACAGACT(GA)4CTGATG(GA)4CT(GA)9GG	(GA)2A AGG(G A)3GGG CG	212	


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                280          *          300          *          320          *          340
Aona-DRB1*0328GB : AGCGGAgAGGTGAGcGCGGCGGGgCGGGCCCTCCCTGTGAgCTGCcgaTCAGAGA gaga ga
Aona-DRB1*0329GA : AGCGGAGAGGTGAGCGCGGCGGGCGGGCCCTCCCTGTGAGCTGCCGATCAGAGAGAGACTGAGAGAGA : 345
Aona-DRB1*031701GA : AGCGGAGAGGTGAGCGCGGCGGGCGGGCCCTCCCTGTGAGCTGCCGATCAGAGAGAGACTGAGAGAGA : 345
Aovo-DRB1*0304GA : AGCGGAGAGGTGAGCGCGGCGGGCGGGCCCTCCCTGTGAGCTGCCGATCAGAGAGAGACTGAGAGAGA : 345
Aovo-DRB1*0305GA : AGCGGAGAGGTGAGCGCGGCGGGCGGGCCCTCCCTGTGAGCTGCCGATCAGAGAGAGACTGAGAGAGA : 345
Aovo-DRB1*0306GA : AGCGGAGAGGTGAGCGCGGCGGGCGGGCCCTCCCTGTGAGCTGCCGATCAGAGAGAGACTGAGAGAGA : 345
Aovo-DRB1*0307GA : AGCGGAGAGGTGAGCGCGGCGGGCGGGCCCTCCCTGTGAGCTGCCGATCAGAGAGAGACTGAGAGAGA : 345
Aona-DRB3*0615 : AGCGGAGAGGTGAGCGCGGCGGGCGGGCCCTCCCTGTGAGCTGCCGATCAGAGAGAGACTGAGAGAGA : 345
Aona-DRB3*0627 : AGCGGAGAGGTGAGCGCGGCGGGCGGGCCCTCCCTGTGAGCTGCCGATCAGAGAGAGACTGAGAGAGA : 345
Aona-DRB3*062501 : AGCGGAGAGGTGAGCGCGGCGGGCGGGCCCTCCCTGTGAGCTGCCGATCAGAGAGAGACTGAGAGAGA : 345
Aona-DRB3*0626 : AGCGGAGAGGTGAGCGCGGCGGGCGGGCCCTCCCTGTGAGCTGCCGATCAGAGAGAGACTGAGAGAGA : 345
Aona-DRB3*062502 : AGCGGAGAGGTGAGCGCGGCGGGCGGGCCCTCCCTGTGAGCTGCCGATCAGAGAGAGACTGAGAGAGA : 345
Aona-DRB3*0628 : AGCGGAGAGGTGAGCGCGGCGGGCGGGCCCTCCCTGTGAGCTGCCGATCAGAGAGAGACTGAGAGAGA : 345
Aovo-DRB3*0601 : AGCGGAGAGGTGAGCGCGGCGGGCGGGCCCTCCCTGTGAGCTGCCGATCAGAGAGAGACTGAGAGAGA : 345
Aona-DRB*W8901 : AGCGGAGAGGTGAGCGCGGCGGGCGGGCCCTCCCTGTGAGCTGCCGATCAGAGA----CAGAGACTGA : 341
Aona-DRB*W1808 : AGCGGAGAGGTGAGTGCGGCGGGCGGGCCCTCCCTGTGAGCTGCCGATCAGAGA----GAGAGACTGA : 341
Aona-DRB*W1806 : AGCGGAGAGGTGAGTGCGGCGGGCGGGCCCTCCCTGTGAGCTGCCGATCAGAGA----GAGAGACTGA : 341
Aovo-DRB*W1801 : AGCGGAAGGTGAGTGCGGCGGGCGGGCCCTCCCTGTGAGCTGCCGATCAGAGA----GAGAGA---- : 337
Aovo-DRB*W1802 : AGCGGAAGGTGAGTGCGGCGGGCGGGCCCTCCCTGTGAGCTGCCGATCAGAGA----GAGAGACTGA : 341
Aovo-DRB*W1803 : AGCGGAAGGTGAGTGCGGCGGGCGGGCCCTCCCTGTGAGCTGCCGATCAGAGA----GAGAGACTGA : 341
Aovo-DRB*W8801 : AGCGGAGAGGTGAGCGCGGCGGGCGGGCCCTCCCTGTGAGCTGCCGATCAGAGAGAGACTGAGAGAGA : 345
Aovo-DRB*W2901 : AGCGGAGAGGTGAGCGCGGCGGGCGGGCCCTCCCTGTGAGCTGCCGATCAGAGA----CAGAGACTGA : 341
Aona-DRB*W2908 : AGCGGAGAGGTGAGCGCGGCGGGCGGGCCCTCCCTGTGAGCTGCCGATCAGAGA----CAGAGACTGA : 341
Aona-DRB*W2910 : AGCGGAGAGGTGAGCGCGGCGGGCGGGCCCTCCCTGTGAGCTGCCGATCAGAGA----CAGAGACTGA : 341
Aovo-DRB*W3001 : AGCGGAGAGGTGAGCGCGGCGGGCGGGCCCTCCCTGTGAGCTGCCGATCAGAGA----CAGAGACTGA : 341
Aona-DRB*W3002 : AGCGGAGAGGTGAGCGCGGCGGGCGGGCCCTCCCTGTGAGCTGCCGATCAGAGA----CAGAGACTGA : 341
Aovo-DRB*W9201 : AGCGGAGAGGTGAGCGCGGCGGGCGGGCCCTCCCTGTGAGCTGCCGATCAGAGA----CAGAGACTGA : 341
Aovo-DRB*W9202 : AGCGGAGAGGTGAGCGCGGCGGGCGGGCCCTCCCTGTGAGCTGCCGATCAGAGA----CAGAGACTGA : 341
Aona-DRB*W9101 : AGCGGAGAGGTGAGCGCGGCGGGCGGGCCCTCCCTGTGAGCTGCCGATCAGAGA----CAGAGACTGA : 341
Aovo-DRB*W9101 : AGCGGAGAGGTGAGCGCGGCGGGCGGGCCCTCCCTGTGAGCTGCCGATCAGAGA----CAGAGACTGA : 341
Aovo-DRB*W9102 : AGCGGAGAGGTGAGCGCGGCGGGCGGGCCCTCCCTGTGAGCTGCCGATCAGAGA----CAGAGACTGA : 341
Aovo-DRB*W9001 : AGCGGAGAGGTGAGCGCGGCGGGCGGGCCCTCCCTGTGAGCTGCCGATCAGAGA----CAGAGACTGA : 341
Aovo-DRB*W4501 : AGCGGAGAGGTGAGCGCGGCGGGCGGGCCCTCCCTGTGAGCTGCCGATCAGAGA----CAGAGACTGA : 341
Aovo-DRB*W9301 : AGCGGAGAGGTGAGCGCGGCGGGCGGGCCCTCCCTGTGAGCTGCCGATCAGAGA----CAGAGACTGA : 341

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                *          360          *          380          *          400          *
Aona-DRB1*0328GB : CTGAGAGAGAC-----CGAGAGAGAGACACAGAGACACTGAGAGA--GACAGAGAGAGAGAGACTGAG : 406
Aona-DRB1*0329GA : CTGAGAGAGACACTGAGTGAGAGTGTGAGACAGAGAGACAGAGAAAGACTGACAGACAGAGAGAGACTGAG : 414
Aona-DRB1*031701GA : CTGAGAGAGACACTGAGAGAGAGTGTGAGACAGAGAGACAGAGAAAGACTGACAGACAGAGAGAGACTGAG : 414
Aovo-DRB1*0304GA : CCGAGAGAGAG-----GACACAGAGACACTGAGAGA--GACAGAGAGAGAGAGACTGAG : 396
Aovo-DRB1*0305GA : CCGAGAGAGAG-----GACACAGAGACACTGAGAGA--GACAGAGAGAGAGAGACTGAG : 396
Aovo-DRB1*0306GA : CCGAGAGAGAG-----GACACAGAGACACTGAGAGA--GACAGAGAGAGAGAGACTGAG : 396
Aovo-DRB1*0307GA : CCGAGAGAGAG-----GAGAGACACAGAGACACTGAGAGA--GACAGAGAGAGAGAGACTGAG : 400
Aona-DRB3*0615 : CTGAGAGAGAC-----CGAGAGAGAGACACAGAGACACTGAGAGA--GACAGAGAGAGAGAGACTGAG : 406
Aona-DRB3*0627 : CTGAGAGAGAC-----CGAGAGAGAGACACAGAGACACTGAGAGA--GACAGAGAGAGAGAGACTGAG : 406
Aona-DRB3*062501 : CTGAGAGAGAC-----CGAGAGAGAGACACAGAGACACTGAGAGA--GACAGAGAGAGAGAGACTGAG : 406
Aona-DRB3*0626 : CTGAGAGAGAC-----CGAGAGAGAGACACAGAGACACTGAGAGA--GACAGAG--AGAGAGACTGAG : 404
Aona-DRB3*062502 : CCGAGAGAGAC-----CGAGAGAGAGACACAGAGACACTGAGAGA--GACAGAGAGAGAGAGACTGAG : 406
Aona-DRB3*0628 : CTGAGAGAGAC-----CGAGAGAGAGACACAGAGACACTGAGAGA--GACAGAGAGAGAGAGACTGAG : 406
Aovo-DRB3*0601 : CTGAGAGAGAC-----CGAGAGAGAGACACAGAGACACTGAGAGA--GACAGAG--GAGAGAGACTGAG : 405
Aona-DRB*W8901 : GA-----GAGACTGAGAGAGAGAG : 360
Aona-DRB*W1808 : GAGAGACTGAG-----AGAGAGAGAGAGA-----GAGACACAGAGAGAGAT : 382
Aona-DRB*W1806 : GAGAGACTGAG-----AGAGAGAGAGAGA-----GAGACACAGAGAGAGAT : 382
Aovo-DRB*W1801 : -----GAGACACAGAGAGAGAT : 354
Aovo-DRB*W1802 : GAGAGACTGAG-----AGAGAG-----AGA-----GAGAGAGAGAGAGACAC : 378
Aovo-DRB*W1803 : GAGAGAGAGAG-----AGAGAGAGAGAGA-----GAGACACAGAGAGAGAT : 382
Aovo-DRB*W8801 : GA-----GAGACTGAGAGAGAGAG : 364
Aovo-DRB*W2901 : GA-----GAGACTGAGAGAGAGAG : 360
Aona-DRB*W2908 : GA-----GAGACTGAGAGAGAGAG : 360
Aona-DRB*W2910 : GA-----GAGACTGAGAGAGAGAG : 360
Aovo-DRB*W3001 : GA-----GAGAGAGAGAGAGAGAA : 360
Aona-DRB*W3002 : GA-----GAGAGAGAGAGAGAAAG : 360
Aovo-DRB*W9201 : GA-----GAGAGAGAGAGAGAGAA : 360
Aovo-DRB*W9202 : GA-----GAGAGAGAGAGAGAAAG : 360
Aona-DRB*W9101 : -----CAGAGAGACCGAGAGAG : 348
Aovo-DRB*W9101 : -----CAGAGAGACCGAGAGAG : 348
Aovo-DRB*W9102 : -----CAGAGAGACCGAGAGAG : 348
Aovo-DRB*W9001 : -----CAGAGACTGAGAGAGAC : 348
Aovo-DRB*W4501 : GA-----GAGACTGAGAGAGAGAC : 360
Aovo-DRB*W9301 : -----GAGACTGAGAGAGAGAG : 348

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	420	*	440	*	460	*	480	
	aga							
Aona-DRB1*0328GB	:	AGA-GACAGTGA--GAGA-----	-----	CTGAGAGACTGAGACTGAGAG	:	442		
Aona-DRB1*0329GA	:	AGG-TACACTGA--GAGAGACAGAGT	GAGACAGAGAGACAGAGTAAGACT	GACAGAGAGAGACTGAGAG	:	480		
Aona-DRB1*031701GA	:	AGG-TACACTGA--GAGAGACAGAGT	GAGACAGAGAGACAGAGTAAGACT	GACAGAGAGAGACTGAGAG	:	480		
Aovo-DRB1*0304GA	:	AGA-GACAGTGA--GAGACT-----	-----	GAGAGACTGAGAGAGAC-----	:	430		
Aovo-DRB1*0305GA	:	AGA-GACAGTGA--GAGA-----	-----	CTGAGAGACTGAGACTGAGAG	:	432		
Aovo-DRB1*0306GA	:	AGA-GACAGTGA--GAGACT-----	-----	GAGAGACTGAGAGAGACTGAGAG	:	436		
Aovo-DRB1*0307GA	:	AGA-GACAGTGA--GAGACT-----	-----	GAGAGACTGAGAGAGACTGAGAG	:	440		
Aona-DRB3*0615	:	AGA-GACAGTGA--GAGACT-----	-----	GAGAGACTGAGAGAGACTGAGAG	:	446		
Aona-DRB3*0627	:	AGA-GACAGTGA--GAGACT-----	-----	GAGAGACTGAGAGAGACTGAGAG	:	446		
Aona-DRB3*062501	:	AGA-GACAGTGA--GAGACT-----	-----	GAGAGACTGAGAGAGACTGAGAG	:	446		
Aona-DRB3*0626	:	AGA-GACAGTGA--GAGACT-----	-----	GAGAGACTGAGAGAGACTGAGAG	:	444		
Aona-DRB3*062502	:	AGA-GACAGTGA--GAGACT-----	-----	GAGAGACTGAGAGAGACTGAGAG	:	446		
Aona-DRB3*0628	:	AGA-GACAGTGA--GAGACT-----	-----	GAGAGACTGAGAGAGACTGAGAG	:	446		
Aovo-DRB3*0601	:	AGA-GACAGTGA--GAGACT-----	-----	GAGAGACTGAGAGAGACTGAGAG	:	445		
Aona-DRB*W8901	:	AGA-----	-----		:	363		
Aona-DRB*W1808	:	AGAC--AGAGACAGA--GAG-----	-----		:	398		
Aona-DRB*W1806	:	AGAC--AGAGACAGA--GAG-----	-----		:	398		
Aovo-DRB*W1801	:	AGAC--AGAGACAGA--GAG-----	-----		:	370		
Aovo-DRB*W1802	:	AGAG--AGAGATAGACAGAG-----	-----		:	396		
Aovo-DRB*W1803	:	AGAC--AGAGACAGA--GAG-----	-----		:	398		
Aovo-DRB*W8801	:	AGAC--TGAGAGAGAGAGAG-----	-----		:	382		
Aovo-DRB*W2901	:	AGA-----	-----		:	363		
Aona-DRB*W2908	:	AGA-----	-----		:	363		
Aona-DRB*W2910	:	AGA-----	-----		:	363		
Aovo-DRB*W3001	:	AGA-----	-----		:	363		
Aona-DRB*W3002	:	AGA-----	-----		:	363		
Aovo-DRB*W9201	:	AGA-----	-----		:	363		
Aovo-DRB*W9202	:	AGA-----	-----		:	363		
Aona-DRB*W9101	:	AGA-----	-----		:	351		
Aovo-DRB*W9101	:	A-----	-----		:	349		
Aovo-DRB*W9102	:	CGA-----	-----		:	351		
Aovo-DRB*W9001	:	TGA-----	-----		:	351		
Aovo-DRB*W4501	:	TGA-----	-----		:	363		
Aovo-DRB*W9301	:	ACT-----	-----		:	351		

	*	500	*	520	*	540	*	
	gagaga a							
Aona-DRB1*0328GB	:	AGAC-----	ACTGAGAGAGACAGAGT---	GAGACAGAGAGACA--	GAGAAAGGCTGACAGACAGAGA	:	499	
Aona-DRB1*0329GA	:	ATAC-----	ACTGAGAGAGACAGAGACT	GAGAGACAGAGAGACTGAGAGAGACAGAGAGACTGAAA	:	543		
Aona-DRB1*031701GA	:	ATAC-----	ACTGAGAGAGACAGAGACT	GAGAGACAGCGAGACACTGAGAGAGACAGAGAGACTGAAA	:	543		
Aovo-DRB1*0304GA	:	-----	ACTGAGAGAGACAGAGT---	GAGACAGAGAAACA--	GAGAAAGAC-----	:	470	
Aovo-DRB1*0305GA	:	AGAC-----	ACTGAGAGAGACAGAGG---	GAGACAGAGAGACA--	GAGAAAGACTGAGAGACAGAGA	:	489	
Aovo-DRB1*0306GA	:	AGAC-----	ACTGAGAGAGACAGAGT---	GAGACAGAGAAACA--	GAGAAAGAC-----	:	480	
Aovo-DRB1*0307GA	:	AGAC-----	ACTGAGAGAGACAGAGT---	GAGACAGAGAAACA--	GAGAAAGAC-----	:	484	
Aona-DRB3*0615	:	AGAC-----	ACTGAGAGAGACAGAGT---	GAGACAGAGAAACA--	GAGAAAGAC-----	:	490	
Aona-DRB3*0627	:	AGAC-----	ACTGAGAGAGACAGAGG---	GAGACAGAGAGACA--	GAGAAAGACTGAGAGACAGAGA	:	503	
Aona-DRB3*062501	:	AGAC-----	ACTGAGAGAGACAGAGT---	GAGACAGAGAAACA--	GAGAAAGAC-----	:	490	
Aona-DRB3*0626	:	AGAC-----	ACTGAGAGAGACAGAGT---	GAGACAGAGAAACA--	GAGAAAGAC-----	:	488	
Aona-DRB3*062502	:	AGAC-----	ACTGAGAGAGACAGAGT---	GAGACAGAGAAACA--	GAGAAAGAC-----	:	490	
Aona-DRB3*0628	:	AGAC-----	ACTGAGAGAGACAGAGG---	GAGACAGAGAGACA--	GAGAAAGACTGAGAGACAG---	:	500	
Aovo-DRB3*0601	:	AGAC-----	ACTGAGAGAGACAGAGT---	GAGACAGAGAAACA--	GAGAAAGAC-----	:	489	
Aona-DRB*W8901	:	-----	ATGAGAGAGACTGA-----			:	377	
Aona-DRB*W1808	:	--	ACTGAGAGACTGTGAGAGAGACTGA-----			:	423	
Aona-DRB*W1806	:	--	ACTGAGAGACTGTGAGAGAGACTG-----			:	422	
Aovo-DRB*W1801	:	--	ACTGAGAGACTGTGAGAGAGACTGA-----			:	395	
Aovo-DRB*W1802	:	--	ACTGAGAGACTGTGAGAGAGACTG-----			:	420	
Aovo-DRB*W1803	:	--	ACTGAGAGACTGTGAGAGAGACTG-----			:	422	
Aovo-DRB*W8801	:	--	ACTGAGAGAGAATGAGAGAGACTGA-----			:	407	
Aovo-DRB*W2901	:	-----	ATGAAAGAGACTGA-----			:	377	
Aona-DRB*W2908	:	-----	ATGAGAGAGACTGA-----			:	377	
Aona-DRB*W2910	:	-----	ATGAGAGAGACTGA-----			:	377	
Aovo-DRB*W3001	:	-----	GAGAGAGAGAG-----			:	374	
Aona-DRB*W3002	:	-----	GAGAGAGAGAG-----			:	374	
Aovo-DRB*W9201	:	-----	GAGAGAGAGAG-----			:	374	
Aovo-DRB*W9202	:	-----	GAGAGAGAGAA-----			:	374	
Aona-DRB*W9101	:	-----	CTGAGAGAGACTGC-----			:	365	
Aovo-DRB*W9101	:	-----				:	-	
Aovo-DRB*W9102	:	-----	CTGAGAGAGACTGA-----			:	365	
Aovo-DRB*W9001	:	-----	GAGA-----			:	355	
Aovo-DRB*W4501	:	-----	GAGAGAGAGTG-----			:	374	
Aovo-DRB*W9301	:	-----	GAGAG-----			:	356	

	700	*	720	*	740	*	76
Aona-DRB1*0328GB	:	CACTGAGAGAGACAGAGA--GACTGAAAGACTGAGAGATACTTAGGGAGACTGAGAGAAAC-----A	:	667			
Aona-DRB1*0329GA	:	GACTGAGGGAGACAGAGAATGAGAGAGAGACTGAGAGACAAG-ACAGAGACTGAGAGAGATGAGACAGA	:	747			
Aona-DRB1*031701GA	:	GACTGAGGGAGACCAGAGAATGAGAGAGAGACTGAGAGACAAG-ACAGAGACTGAGAGAGATGAGACAGA	:	747			
Aovo-DRB1*0304GA	:	-----	:	-			
Aovo-DRB1*0305GA	:	GACT-----	:	597			
Aovo-DRB1*0306GA	:	-----	:	-			
Aovo-DRB1*0307GA	:	-----	:	-			
Aona-DRB3*0615	:	-----	:	-			
Aona-DRB3*0627	:	GGCT-----	:	613			
Aona-DRB3*062501	:	-----	:	-			
Aona-DRB3*0626	:	-----	:	-			
Aona-DRB3*062502	:	-----	:	-			
Aona-DRB3*0628	:	GACT-----	:	609			
Aovo-DRB3*0601	:	-----	:	-			
Aona-DRB*W8901	:	-----	:	-			
Aona-DRB*W1808	:	-----	:	-			
Aona-DRB*W1806	:	-----	:	-			
Aovo-DRB*W1801	:	-----	:	-			
Aovo-DRB*W1802	:	-----	:	-			
Aovo-DRB*W1803	:	-----	:	-			
Aovo-DRB*W8801	:	-----	:	-			
Aovo-DRB*W2901	:	-----	:	-			
Aona-DRB*W2908	:	-----	:	-			
Aona-DRB*W2910	:	-----	:	-			
Aovo-DRB*W3001	:	-----	:	-			
Aona-DRB*W3002	:	-----	:	-			
Aovo-DRB*W9201	:	-----	:	-			
Aovo-DRB*W9202	:	-----	:	-			
Aona-DRB*W9101	:	-----	:	-			
Aovo-DRB*W9101	:	-----	:	-			
Aovo-DRB*W9102	:	-----	:	-			
Aovo-DRB*W9001	:	-----	:	-			
Aovo-DRB*W4501	:	-----	:	-			
Aovo-DRB*W9301	:	-----	:	-			

	0	*	780	*	800	*	820
Aona-DRB1*0328GB	:	GAGAGACTGAGAGAGACTGAGAGAAAAGACTGAGAGAGAGACTGAGAGAGGCTGAGAGACTGAGGGGAGA-	:	735			
Aona-DRB1*0329GA	:	GAGAGACTGAGAGAGACTAAGAGA--GACTGAGGGGAGA--CTGAGAGAGACTGAAAGACTGAGAGAGAG	:	812			
Aona-DRB1*031701GA	:	GAGAGACTGAGAGAGACTAAGAGA--GACTGAGGGGAGA--CTGAGAGAGACTGAAAGACTGAGAGAGAG	:	812			
Aovo-DRB1*0304GA	:	-----GA-----CTGAGAGAGACTGAGAGACTGAGAGAAA-	:	599			
Aovo-DRB1*0305GA	:	-----GAGAGACTGAGAGA--TACTTAGGGGAGA--CTGAGAGAGACAGAGAGACTGAGAGAGA-	:	651			
Aovo-DRB1*0306GA	:	-----GA-----CTGAGAGAGACTGAGAGACTGAGAGAAA-	:	609			
Aovo-DRB1*0307GA	:	-----GA-----CTGAGAGAGACTGAGAGACTGAGAGAAA-	:	613			
Aona-DRB3*0615	:	-----CTGAGAGA-----AAGA--CTGAGAGAGACTGAGAGACTGAGAGAAA-	:	627			
Aona-DRB3*0627	:	-----GAGAGACTGAGAGA--TACTTAGGGGAGA--CTGAGAGAGACAGAGAGACTGAGAGAAAAG	:	668			
Aona-DRB3*062501	:	-----CTGAGAGA-----AAGA--CTGAGAGAGACTGAGAGACTGAGAGAAA-	:	627			
Aona-DRB3*0626	:	-----CTGAGAGA-----AAGA--CTGAGAGAGACTGAGAGACTGAGAGAAA-	:	625			
Aona-DRB3*062502	:	-----CTGAAAGA-----CTGAGAGAGACTGAGAGACTGAGAGAAA-	:	623			
Aona-DRB3*0628	:	-----GAGAGACTGAGAGA--TACTTAGGGGAGA--CTGAGAGAGACAGAGAGACTGAGAGAAAAG	:	664			
Aovo-DRB3*0601	:	-----CTGAGAGA-----AAGA--CTGAGAGAGACTGAGAGACTGAGAGAAA-	:	626			
Aona-DRB*W8901	:	-----AAGAC-	:	418			
Aona-DRB*W1808	:	-----GACTGAGA--	:	487			
Aona-DRB*W1806	:	-----GACTGAGA--	:	477			
Aovo-DRB*W1801	:	-----GACTGAGA--	:	459			
Aovo-DRB*W1802	:	-----GACTGAGA--	:	475			
Aovo-DRB*W1803	:	-----GACTGAGA--	:	463			
Aovo-DRB*W8801	:	-----CTGAAAGAC-	:	462			
Aovo-DRB*W2901	:	-----AAGAC-	:	418			
Aona-DRB*W2908	:	-----AAGAC-	:	418			
Aona-DRB*W2910	:	-----AAGAC-	:	418			
Aovo-DRB*W3001	:	-----GAGAG-	:	411			
Aona-DRB*W3002	:	-----GAG--	:	413			
Aovo-DRB*W9201	:	-----GAG--	:	409			
Aovo-DRB*W9202	:	-----GAG--	:	409			
Aona-DRB*W9101	:	-----	:	-			
Aovo-DRB*W9101	:	-----	:	-			
Aovo-DRB*W9102	:	-----	:	-			
Aovo-DRB*W9001	:	-----	:	-			
Aovo-DRB*W4501	:	-----	:	-			
Aovo-DRB*W9301	:	-----	:	-			

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*      840      *      860      *      880      *
Aona-DRB1*0328GB : -----CAGAGAATGAGAGAGA--GACTGAGAGA---TAAGACAGAGACTGAGAGAGA : 782
Aona-DRB1*0329GA : ACTGAGAGAGACAAGACAGAGACTGAGAGAGATGAGACAGAGAGAGACTGAGAGAAAGACTGAGAGACA : 881
Aona-DRB1*031701GA : ACTGAGAGAGACAAGACAGAGACTGAGAGAGATGAGACAGAGAGAGACTGAGAGAAAGACTGAGAGACA : 881
Aovo-DRB1*0304GA : ----- : -
Aovo-DRB1*0305GA : -----CTGAGAGAAAGACTGAGAGAGA-- : 671
Aovo-DRB1*0306GA : ----- : -
Aovo-DRB1*0307GA : ----- : -
Aona-DRB3*0615 : ----- : -
Aona-DRB3*0627 : ACT-----GAGAGAGACTGAGAGACT : 689
Aona-DRB3*062501 : ----- : -
Aona-DRB3*0626 : ----- : -
Aona-DRB3*062502 : ----- : -
Aona-DRB3*0628 : ACT-----GAGAGAGACTGAGAGACT : 685
Aovo-DRB3*0601 : ----- : -
Aona-DRB*W8901 : ----- : -
Aona-DRB*W1808 : ----- : -
Aona-DRB*W1806 : ----- : -
Aovo-DRB*W1801 : ----- : -
Aovo-DRB*W1802 : ----- : -
Aovo-DRB*W1803 : ----- : -
Aovo-DRB*W8801 : ----- : -
Aovo-DRB*W2901 : ----- : -
Aona-DRB*W2908 : ----- : -
Aona-DRB*W2910 : ----- : -
Aovo-DRB*W3001 : ----- : -
Aona-DRB*W3002 : ----- : -
Aovo-DRB*W9201 : ----- : -
Aovo-DRB*W9202 : ----- : -
Aona-DRB*W9101 : ----- : -
Aovo-DRB*W9101 : ----- : -
Aovo-DRB*W9102 : ----- : -
Aovo-DRB*W9001 : ----- : -
Aovo-DRB*W4501 : ----- : -
Aovo-DRB*W9301 : ----- : -

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900      *      920      *      940      *      960
ga ag g agagac
Aona-DRB1*0328GB : T-GAGACAGAGAGA---GACTGA--GAGAAAGACTGAGAGACAGAGA---CTGAGAGACTGAGAGAGA- : 839
Aona-DRB1*0329GA : --GAGACTGAGAGACTGAGACTGAGAGAAAATAGACTGAGAGACTGAGAGACACTGAGAGACTGAGAGAC : 948
Aona-DRB1*031701GA : --GAGACTGAGAGACTGAGACTGAGAGAAAATAGACTGAGAGACTGAGAGACACTGAGAGACTGAGAGAC : 948
Aovo-DRB1*0304GA : -----CAGAGA-----CTGAGAGACTGAGAGACACTGAGAGACTGAGAGAC : 640
Aovo-DRB1*0305GA : -----GACTGAGAGAGA-----AACAGGGACTGAGAGACTGAGAGACACTGAGAGACTGAGAGAC : 724
Aovo-DRB1*0306GA : -----CAGAGA-----CTGAGAGACTGAGAGACACTGAGAGACTGAGAGAC : 650
Aovo-DRB1*0307GA : -----CAGAGA-----CTGAGAGACTGAGAGACACTGAGAGACTGAGAGAC : 654
Aona-DRB3*0615 : -----CAGAGA-----CTGAGAGACTGAGAGACACTGAGAGACTGAGAGAC : 668
Aona-DRB3*0627 : GAGAGACTGAGAGAGA-----AACAGAGACTGAGAGACTGAGAGACACTGAGAGACTGAGAGAC : 746
Aona-DRB3*062501 : -----CAGAGA-----CTGAGAGACTGAGAGACACTGAGAGACTGAGAGAC : 668
Aona-DRB3*0626 : -----CAGAGA-----CTGAGAGACTGAGAGACACTGAGAGACTGAGAGAC : 666
Aona-DRB3*062502 : -----CAGAGA-----CTGAGAGACTGAGAGACACTGAGAGACTGAGAGAC : 664
Aona-DRB3*0628 : GAGAGACTGAGAGAGA-----AACAGAGACTGAGAGACTGAGAGACACTGAGAGACTGAGAGAC : 742
Aovo-DRB3*0601 : -----CAGAGA-----CTGAGAGACTGAGAGACACTGAGAGACTGAGAGAC : 667
Aona-DRB*W8901 : -----GAGACAG-----AG-----AGAAAC : 433
Aona-DRB*W1808 : -----GAGGCTG-----AGAGACTCGGAGAGAC : 510
Aona-DRB*W1806 : -----GAGACTG-----AGAGACTCGGAGAGAC : 500
Aovo-DRB*W1801 : -----GAGACTG-----AGAGACTCGGAGAGAC : 482
Aovo-DRB*W1802 : -----GAGACTG-----AGAGACTCGGAGAGAC : 498
Aovo-DRB*W1803 : -----GAGACTG-----AGAGACTCGGAGAGAC : 486
Aovo-DRB*W8801 : -----GAGACAG-----AG-----AGAGAC : 477
Aovo-DRB*W2901 : -----GAGACAG-----AG-----AGAGAC : 433
Aona-DRB*W2908 : -----GAGACAG-----AG-----AGAAAC : 433
Aona-DRB*W2910 : -----GAGACAG-----AG-----AGAAAC : 433
Aovo-DRB*W3001 : -----GAGACAG-----AG-----AGAGAC : 426
Aona-DRB*W3002 : -----AGAGAG-----AGT-----GGAGAC : 428
Aovo-DRB*W9201 : -----GAGACAG-----AG-----AGAGAC : 424
Aovo-DRB*W9202 : -----GAGACAG-----AG-----AGAGAC : 424
Aona-DRB*W9101 : -----GACTGAG-----AGAGA----GAGACTG : 392
Aovo-DRB*W9101 : -----GACTGAG-----AGAGA----GAGACTG : 368
Aovo-DRB*W9102 : -----GACTGAG-----AGAGA----GAGACTG : 392
Aovo-DRB*W9001 : -----GAATGAG-----AGAGA----CTGAGAG : 374
Aovo-DRB*W4501 : -----AGACAG-----AG-----AGAGAC : 413
Aovo-DRB*W9301 : ----- : -

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          *           980           *           1000           *           1020           *
          ag  aga  a                               ActGA agAga  agA  A
Aona-DRB1*0328GB : ---GACAGAGACTGAGAGACTGAGAGA---CTGAGAGACACAGATAGAGATTGAGAGACTGAGAGAGA : 901
Aona-DRB1*0329GA : ACAGATAGAGATTGAGAGACTGAGAGAGAGACTGAGAGACACTGATAGAGACTGAGAGAGAGACTGAGA : 1017
Aona-DRB1*031701GA : ACAGATAGAGATTGAGAGACTGAGAGAGAGACTGAGAGACACTGATAGAGACTGAGAGAGAGACTGAGA : 1017
Aovo-DRB1*0304GA : ACAGATAGAGATTGAGAGACTGAGAGA-----CACTGATAGAGACTGAGAGA--GACTGAGA : 695
Aovo-DRB1*0305GA : ACAGATAGAAATTGAGAGACTGAGAGA-----CACTGATAGAGACTGAGAGAGAGACTGAGA : 781
Aovo-DRB1*0306GA : ACAGATAGAGATTGAGAGACTGAGAGA-----CACTGATAGAGACTGAGAGA--GACTGAGA : 705
Aovo-DRB1*0307GA : ACAGATAGAGATTGAGAGACTGAGAGA-----CACTGATAGAGACTGAGAGA--GACTGAGA : 709
Aona-DRB3*0615 : ACAGATAGAGATTGAGAGACTGAGAGAGAGACTGAGAGACACTGATAGAGACTGAGAGAGAGACTGAGA : 737
Aona-DRB3*0627 : ACAGATAGAGATTGAGAGACTGAGAGA-----CACTGATAGAGACTGAGAGAGAGACTGAGA : 803
Aona-DRB3*062501 : ACAGATAGAGATTGAGAGACTGAGAGAGAGACTGAGAGACACTGATAGAGACTGAGAGAGAGACTGAGA : 737
Aona-DRB3*0626 : ACAGATAGAGATTGAGAGACTGAGAGAGAGACTGAGAGACACTGATAGAGACTGAGAGAGAGACTGAGA : 735
Aona-DRB3*062502 : ACAGATAGAGATTGAGAGACTGAGAGAGAGACTGAGAGACACTGATAGAGACTGAGAGAGAGA----- : 727
Aona-DRB3*0628 : ACAGATAGAGATTGAGAGACTGAGAGA-----CACTGATAGAGACTGAGAGAGAGACTGAGA : 799
Aovo-DRB3*0601 : ACAGATAGAGATTGAGAGACTGAGAGAGAGACTGAGAGACACTGATAGAGACTGAGAGAGAGACTGAGA : 736
Aona-DRB*W8901 : TGAG--AGAAACAT-----AGA--GACTGAGAGAGAG--ACACA----- : 466
Aona-DRB*W1808 : TGAGCGAGAGACTG-----AGATAGACTGAGAGAAACTGAGAGA----- : 549
Aona-DRB*W1806 : TGAGCGAGAGACTG-----AGATAGACTGAGAGAAACTGAGAGA----- : 539
Aovo-DRB*W1801 : TGAGCGAGAGACTG-----AGATAGACTGAGAGAAACTGAGAGA----- : 521
Aovo-DRB*W1802 : TGAGCGAGAGACTG-----AGATAGACTGAGAGAAAC--AGAGA----- : 535
Aovo-DRB*W1803 : TGAGCGAGAGACTG-----AGATAGACTGAGAGAAACTGAGAGA----- : 525
Aovo-DRB*W8801 : TGAG--AGAAACAG-----AGA--GACTGAGAGAGGG--ACACA----- : 510
Aovo-DRB*W2901 : TGAG--AGAAACAT-----AGA--GACTGAGAGAGAG--ACACA----- : 466
Aona-DRB*W2908 : TGAG--AGAAACAT-----AGA--GACTGAGAGAGAG--ACACA----- : 466
Aona-DRB*W2910 : TGAG--AGAAACAT-----AGA--GACTGAGAGAGAG--ACACA----- : 466
Aovo-DRB*W3001 : --AG--AGAGACTG-----AGA--GACTGAGAAAGAC--AGAGA----- : 457
Aona-DRB*W3002 : AGAG--AGAGACAG-----AGA--GACTGAGAAAGAC--AGAGA----- : 461
Aovo-DRB*W9201 : --AG--AGAGACTG-----AGA--GACTGAGAAAGAC--AGAGA----- : 455
Aovo-DRB*W9202 : --AG--AGAGACTG-----AGA--GACTGAGAAAGAC--AGAGA----- : 455
Aona-DRB*W9101 : AAAGACGAGACA-----GAGAGAGACTGAGAGAGGGACA----- : 426
Aovo-DRB*W9101 : AAAGACGAGACA-----GAGAGAGACTGAGAGAGGGACA----- : 402
Aovo-DRB*W9102 : AAAGACGAGACA-----GAGAGAGACTGAGAGAGGGACA----- : 426
Aovo-DRB*W9001 : AGACTGAGAGAT-----AGAGACTGAGAGACAGACA----- : 405
Aovo-DRB*W4501 : --AG--AGAGGCTG-----AGA--GACTGAGAAAGAC--AGAGA----- : 444
Aovo-DRB*W9301 : -----AGAGACTGAGAGAGAGAGAGAGA----- : 379

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          1040           *           1060           *           1080           *           1100
          ag  agaGAGa  AgaG  ga                               GaGagaGc
Aona-DRB1*0328GB : GACTGGGGGGG--GAGAGAGAGAGAGAGAGAGAGA-----CTGAGAGAGCACGCTG : 949
Aona-DRB1*0329GA : GACTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGA---CTGAGAGAGCGCTG : 1082
Aona-DRB1*031701GA : GACTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGACTGAGAGAGCGCTG : 1086
Aovo-DRB1*0304GA : GACTGAGAGAGAGAGAGAGAGAGAGAAA-----CTGAGAGAGCACTTG : 738
Aovo-DRB1*0305GA : GACTGAGAGACAGAGAGAGAGAGAGAGAAA-----CTGAGAGAGCACTTG : 828
Aovo-DRB1*0306GA : GACTGAGAGAGAGAGAGAGAGAGAGAGAAA-----CTGAGAGAGCACTTG : 752
Aovo-DRB1*0307GA : GACTGAGAGAGAGAGAGAGAGAGAGAGAAA-----CTGAGAGAGCACTTG : 756
Aona-DRB3*0615 : GACTGAGAGAGAGAGAGAGAGAGAGAGAGAGA-----CTGAGAGAGCGCTTG : 786
Aona-DRB3*0627 : GACTGAGAGAGAGAGAGAGAGAGAGAAA-----CTGAGAGAGCACTTG : 844
Aona-DRB3*062501 : GACTGAGAGAGAGAGAGAGAGAGAGAGAGAGA-----CTGAGAGAGCGCTTG : 786
Aona-DRB3*0626 : GACTGAGAGAGAGAGAGAGAGAGAGAGAGAGA-----CTGAGAGAGCGCTTG : 784
Aona-DRB3*062502 : -----GAGAGAGAGAGAGAGAGAGA-----CTGAGAGAGCGCTTG : 764
Aona-DRB3*0628 : GACTGAGAGAGAGAGAGAGAGAGAGAGAAA-----CTGAGAGAGCACTTG : 842
Aovo-DRB3*0601 : GACTGAGAGAGAGAGAGAGAGAGAGAGAGAGA-----CTGAGAGAGCGCTTG : 785
Aona-DRB*W8901 : ----GAG--AGAGAGACAGAGCGA-----GAGAGAGCG---- : 493
Aona-DRB*W1808 : ----TACTGAGAGAGAGAGAGCGC-----CGCACAGCG---- : 578
Aona-DRB*W1806 : ----TACTGAGAGAGAGAGAGCGC-----CGCACAGCG---- : 568
Aovo-DRB*W1801 : ----TACTGAGAGAGAGAGAGCGC-----CGCACAGCG---- : 550
Aovo-DRB*W1802 : ----TACTGAGAGAGAGAGAGCGC-----CGCACAGCG---- : 564
Aovo-DRB*W1803 : ----TACTGAGAGAGAGAGAGCGC-----CGCACAGCG---- : 554
Aovo-DRB*W8801 : ----GAG--AGAGAGACAGAGCGA-----GAGAGAGCG---- : 537
Aovo-DRB*W2901 : ----GAG--AGAGAGACAGAGCGA-----GAGAGAGCG---- : 493
Aona-DRB*W2908 : ----GAG--AGAGAGACAGAGCGA-----GAGAGAGCG---- : 493
Aona-DRB*W2910 : ----GAG--AGAGAGACAGAGCGA-----GAGAGAGCG---- : 493
Aovo-DRB*W3001 : ----GAGCCAGAGAGCCAGAGCCA-----GAGAGAGCA---- : 486
Aona-DRB*W3002 : ----GAGCCAGAGAGCCAGAGCCA-----GAGAGAGCA---- : 490
Aovo-DRB*W9201 : ----GAGCCAGAGAGCCAGAGCCA-----GAGAGAGCA---- : 484
Aovo-DRB*W9202 : ----GAGCCAGAGAGCCAGAGCCA-----GAGAGAGCA---- : 484
Aona-DRB*W9101 : ----CAGAGAGAGAGACAGAGCGA-----GAGAGAGCG---- : 455
Aovo-DRB*W9101 : ----CAGAGAGAGAGACAGAGCGA-----GAGAGAGCG---- : 431
Aovo-DRB*W9102 : ----CAGAGAGAGAGACAGAGCGA-----GAGAGAGCG---- : 455
Aovo-DRB*W9001 : ----CAGAGAGAGAGACAGAGCGA-----GAGAGAGCG---- : 434
Aovo-DRB*W4501 : ----GAGCCAGAGAGCCAGAGCCA-----GAGAGAGCA---- : 473
Aovo-DRB*W9301 : ----GAGAGAGAGAGAGACTGAGA-----GAGCGGCTG---- : 408

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*          1260          *          1280          *          1300          *
Aona-DRB1*0328GB : Ggcctct gtg gagg gaca gagg gg t cagggg tggaga ggaggagacct gattgtcc : 1152
Aona-DRB1*0329GA : GGCCTCT-GTGGGGAGGTGACACAGGAGGTGGGTGCAGGGG-TGGAGAGGGAGGAGACCTCGATTGTCC : 1285
Aona-DRB1*031701GA : GGCCTCT-GTGGGGAGGTGACACAGGAGGTGGGTGCAGGGG-TGGAGAGGGAGGAGACCTCGATTGTCC : 1289
Aovo-DRB1*0304GA : GGCCTCT-GTGGGGAGGTGACACAGGAGGTGGGTGCAGGGG-TGGAGAGGGAGGAGACCTCGATTGTCC : 941
Aovo-DRB1*0305GA : GGCCTCT-GTGGGGAGGTGACACAGGAGGTGGGTGCAGGGG-TGGAGAGGGAGGAGACCTCGATTGTCC : 1031
Aovo-DRB1*0306GA : GGCCTCT-GTGGGGAGGTGACACAGGAGGTGGGTGCAGGGG-TGGAGAGGGAGGAGACCTCGATTGTCC : 955
Aovo-DRB1*0307GA : GGCCTCT-GTGGGGAGGTGACACAGGAGGTGGGTGCAGGGG-TGGAGAGGGAGGAGACCTCGATTGTCC : 959
Aona-DRB3*0615 : GGCCTCT-GTGGGGAGGTGACACAGGAGGTGGGTGCAGGGG-TGGAGAGGGAGGAGACCTCGATTGTCC : 987
Aona-DRB3*0627 : GGCCTCT-GTGGGGAGGTGACACAGGAGGTGGGTGCAGGGG-TGGAGAGGGAGGAGACCTCGATTGTCC : 1047
Aona-DRB3*062501 : GGCCTCT-GTGGGGAGGTGACACAGGAGGTGGGTGCAGGGG-TGGAGAGGGAGGAGACCTCGATTGTCC : 987
Aona-DRB3*0626 : GGCCTCT-GTGGGGAGGTGACACAGGAGGTGGGTGCAGGGG-TGGAGAGGGAGGAGACCTCGATTGTCC : 985
Aona-DRB3*062502 : GGCCTCT-GTGGGGAGGTGACACAGGAGGTGGGTGCAGGGG-TGGAGAGGGAGGAGACCTCGATTGTCC : 965
Aona-DRB3*0628 : GGCCTCT-GTGGGGAGGTGACACAGGAGGTGGGTGCAGGGG-TGGAGAGGGAGGAGACCTCGATTGTCC : 1045
Aovo-DRB3*0601 : GGCCTCT-GTGGGGAGGTGACACAGGAGGTGGGTGCAGGGG-TGGAGAGGGAGGAGACCTCGATTGTCC : 986
Aona-DRB*W8901 : GGCCTCT-GTGAGGAGGTGACATGGGAGGCGGGTGCAGGGG-TGGAGAGGGAGGAGACCTCGATTGTCC : 695
Aona-DRB*W1808 : GGCCTCTGTGTGTTGAGGGGACATGTGAGGTGGCTGCAGGGGCTGGAGAGGGAGGAGACCTCGATTGTCC : 783
Aona-DRB*W1806 : GGCCTCTTGTGTTGAGGGGACATGTGAGGTGGCTGCAGGGGCTGGAGAGGGAGGAGACCTCGATTGTCC : 773
Aovo-DRB*W1801 : G----- : 689
Aovo-DRB*W1802 : GGCCTCTTGTGTTGAGGGGACATGTGAGGTGGCTGCAGGGGCTGGAGAGGGAGGAGACCTCGATTGTCC : 769
Aovo-DRB*W1803 : GGCCTCTTGTGTTGAGGGGACATGTGAGGTGGCTGCAGGGGCTGGAGAGGGAGGAGACCTCGATTGTCC : 759
Aovo-DRB*W8801 : GGCCTCT-GTGAGGAGGTGACATGGGAGGCGGGTGCAGGGG-TGGAGACGGAGGAGACCTGGATTGTCC : 740
Aovo-DRB*W2901 : GGCCTCT-GTGAGGAGGTGACATGGGAGGCGGGTGCAGGGG-TGGAGAGGGAGGAGACCTGGATTGTCC : 696
Aona-DRB*W2908 : GGCCTCT-GTGAGGAGGTGACATGGGAGGCGGGTGCAGGGG-TGGAGAGGGAGGAGACCTGGATTGTCC : 696
Aona-DRB*W2910 : GGCCTCT-GTGAGGAGGTGACATGGGAGGCGGGTGCAGGGG-TGGAGAGGGAGGAGACCTGGATTGTCC : 696
Aovo-DRB*W3001 : G----- : 623
Aona-DRB*W3002 : GGCCTCT-GTGGGGAGGTGACACAGGAGGTGGGTGCAGAGG-TGGGGAGGGAGGAGACCTCGTTGTCA : 693
Aovo-DRB*W9201 : G----- : 621
Aovo-DRB*W9202 : G----- : 621
Aona-DRB*W9101 : GGCCTCT-GTGAGGAGGTGACATGGGAGGCGGGTACAGGGG-TGGAGACGGAGGAGACCTGGATTGTCC : 658
Aovo-DRB*W9101 : GGCCTCT-GTGAGGAGGTGACATGGGAGGCGGGTACAGGGG-TGGAGACGGAGGAGACCTGGATTGTCC : 634
Aovo-DRB*W9102 : GGCCTCT-GTGAGGAGGTGACATGGGAGGCGGGTACAGGGG-TGGAGACGGAGGAGACCTGGATTGTCC : 658
Aovo-DRB*W9001 : GGCCTCT-GTGAGGAGGTGACATGGGAGGCGGGTGCAGGGG-TGGAGAGGGAGGAGACCTGGATTGTCC : 637
Aovo-DRB*W4501 : G----- : 610
Aovo-DRB*W9301 : G----- : 545

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          1320          *          1340          *          1360          *
Aona-DRB1*0328GB : TTGGTCCTTAGAGATGCAGGAA-GGGAAATGTGAAGTGTGTGTGGCTGGGGTGAGGGTTTA : 1212
Aona-DRB1*0329GA : TTGGTCCTTAGAGATGCAGGAA-GGGAAATGTGAAGTGTGTGTGGCTGGGGTGAGGGTTTA : 1345
Aona-DRB1*031701GA : TTGGTCCTTAGAGATGCAGGAA-GGGAAATGTGAAGTGTGTGTGGCTGGGGTGAGGGTTTA : 1349
Aovo-DRB1*0304GA : TTGGTCCTTAGAGATGCAGGAA-GGGAAATGTGAAGTGTGTGTGGCTGGGGTGAGGGTTTA : 1001
Aovo-DRB1*0305GA : TTGGTCCTTAGAGATGCAGGAA-GGGAAATGTGAAGTGTGTGTGGCTGGGGTGAGGGTTTA : 1091
Aovo-DRB1*0306GA : TTGGTCCTTAGAGATGCAGGAA-GGGAAATGTGAAGTGTGTGTGGCTGGGGTGAGGGTTTA : 1015
Aovo-DRB1*0307GA : TTGGTCCTTAGAGATGCAGGAA-GGGAAATGTGAAGTGTGTGTGGCTGGGGTGAGGGTTTA : 1019
Aona-DRB3*0615 : TTGGTCCTTAGAGATGCAGGAA-GGGAAATGTGAAGTGTGTGTGGCTGGGGTGAGGGTTTA : 1047
Aona-DRB3*0627 : TTGGTCCTTAGAGATGCAGGAA-GGGAAATGTGAAGTGTGTGTGGCTGGGGTGAGGGTTTA : 1107
Aona-DRB3*062501 : TTGGTCCTTAGAGATGCAGGAA-GGGAAATGTGAAGTGTGTGTGGCTGGGGTGAGGGTTTA : 1047
Aona-DRB3*0626 : TTGGTCCTTAGAGATGCAGGAA-GGGAAATGTGAAGTGTGTGTGGCTGGGGTGAGGGTTTA : 1045
Aona-DRB3*062502 : TTGGTCCTTAGAGATGCAGGAA-GGGAAATGTGAAGTGTGTGTGGCTGGGGTGAGGGTTTA : 1025
Aona-DRB3*0628 : TTGGTCCTTAGAGATGCAGGAA-GGGAAATGTGAAGTGTGTGTGGCTGGGGTGAGGGTTTA : 1105
Aovo-DRB3*0601 : TTGGTCCTTAGAGATGCAGGAA-GGGAAATGTGAAGTGTGTGTGGCTGGGGTGAGGGTTTA : 1046
Aona-DRB*W8901 : TGGGTCCTTAGAGATGCAGGAAGGAAATG-TGAGGTGTGTGTGGCTGGGGTGAGGGTTTA : 755
Aona-DRB*W1808 : TGGGTCCTTAGAGATGCAGGAAGGAAATG-TGAAGTGTGTGTGGCTGGGGTGAGGGTTTA : 843
Aona-DRB*W1806 : TGGGTCCTTAGAGATGCAGGAAGGAAATG-TGAGGTGTGTGTGGCTGGGGTGAGGGTTTA : 833
Aovo-DRB*W1801 : ----- : -
Aovo-DRB*W1802 : TGGGTCCTTAGAGATGCAGGAAGGAAATG-TGAGGTGTGTGTGGCTGGGGTGAGGGTTTA : 829
Aovo-DRB*W1803 : TTGGTCCTTAGAGATGCAGGAAGGAAATG-TGAAGTGTGTGTGGCTGGGGTGAGGGTTTA : 819
Aovo-DRB*W8801 : TGGGTCCTTAGAGATGCAGGAATGAAATG-TGAGGTGTGTGTGGCTGGGGTGAGGGTTTA : 800
Aovo-DRB*W2901 : TGGGTCCTTAGAGATGCAGGAAGGAAATG-TGAGGTGTGTGTGGCTGGGGTGAGGGTTTA : 756
Aona-DRB*W2908 : TGGGTCCTTAGAGATGCAGGAAGGAAATG-TGAGGTGTGTGTGGCTGGGGTGAGGGTTTA : 756
Aona-DRB*W2910 : TGGGTCCTTAGAGATGCAGGAAGGAAATG-TGAGGTGTGTGTGGCTGGGGTGAGGGTTTA : 756
Aovo-DRB*W3001 : ----- : -
Aona-DRB*W3002 : TTGGTCCTTAGAGATGCAGGAATGAAATG-TGAGGTGTGTGTGGCTGGGGTGAGGGTTTA : 753
Aovo-DRB*W9201 : ----- : -
Aovo-DRB*W9202 : ----- : -
Aona-DRB*W9101 : TGGGTCCTTAGAGATGCAGGAA-TGGAATGTGAGGTGTGTGTGGCTGGGGTGAGGGTTTA : 718
Aovo-DRB*W9101 : TGGGTCCTTAGAGATGCAGGAA-TGGAATGTGAGGTGTGTGTGGCTGGGGTGAGGGTTTA : 694
Aovo-DRB*W9102 : TGGGTCCTTAGAGATGCAGGAA-TGGAATGTGAGGTGTGTGTGGCTGGGGTGAGGGTTTA : 718
Aovo-DRB*W9001 : TGGGTCCTTAGAGATGCAGGAA-GGGAAATGTGAGGTGTGTGTGGCTGGGGTGAGGGTTTA : 697
Aovo-DRB*W4501 : ----- : -
Aovo-DRB*W9301 : ----- : -

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