



The 17th International
HLA & Immunogenetics
Workshop

Human Immunology manuscript in preparation reference:

High resolution HLA alleles and haplotype frequencies characterized using next-generation sequencing in worldwide unrelated populations: summary from the 17th IHIW unrelated subjects and genetic diversity by NGS HLA project by Creary LE et. al. 2018

Contributors to the Unrelated Study:

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Abbreviations

Populations

Abbreviations: EuAm, European Americans; AfAm, African Americans; USA Hispanics, Spanish speaking individuals residing in the USA; European, individuals from Northern and Western Europe; Spanish, individuals from mainland Spain; Italian, individuals from Italy, Greek, individuals from mainland Greece; API, Asian Pacific Islander population; Thai; individuals from Thailand; Indian, individuals from Northern and Southern India

Allele ambiguities

Alleles with the designated SG suffix refer to short tandem repeat (STR) allele ambiguity groups.

HLA-DQA1 SG alleles;

HLA-DQA1*01:01:01:02|HLA-DQA1*01:01:01:03
HLA-DQA1*01:02:01:01|HLA-DQA1*01:02:01:03|HLA-DQA1*01:02:01:05
HLA-DQA1*01:02:01:04|HLA-DQA1*01:02:01:06|HLA-DQA1*01:02:01:07
HLA-DQA1*01:03:01:02|HLA-DQA1*01:03:01:06
HLA-DQA1*01:03:01:03|HLA-DQA1*01:03:01:04
HLA-DQA1*01:04:01:01|HLA-DQA1*01:04:01:02|HLA-DQA1*01:04:01:04
HLA-DQA1*02:01:01:01|HLA-DQA1*02:01:01:02
HLA-DQA1*05:05:01:01|HLA-DQA1*05:05:01:02
HLA-DQA1*05:05:01:05|HLA-DQA1*05:05:01:06

HLA-DRB1 SG alleles;

HLA-DRB1*03:01:01:01|HLA-DRB1*03:01:01:02
HLA-DRB1*04:01:01:01|HLA-DRB1*04:01:01:02
HLA-DRB1*07:01:01:01|HLA-DRB1*07:01:01:02
HLA-DRB1*13:01:01:01|HLA-DRB1*13:01:01:02
HLA-DRB1*15:01:01:01|HLA-DRB1*15:01:01:02|HLA-DRB1*15:01:01:03
HLA-DRB1*15:03:01:01|HLA-DRB1*15:03:01:02
Allele ambiguities due to unsequenced regions;
HLA-DQB1*03:03:02:02|HLA-DQB1*03:03:02:03
HLA-DQB1*05:03:01:01|HLA-DQB1*05:03:01:02
HLA-DRB4*01:03:01:01|HLA-DRB4*01:03:01:03
HLA-DPB1*02:01:02|HLA-DPB1*02:01:19

Table legends

Table 1 High resolution allele frequencies characterized by NGS in unrelated populations

Abbreviations: Fq, allele frequencies; n, allele count; SG, STR allele ambiguity groups.

Table 2 High resolution frequencies of A~B haplotypes

Abbreviations: Fq, allele frequencies; n, allele count; SG, STR allele ambiguity groups; ld.dprime, Hedrick's D' statistic normalized measure of linkage disequilibrium (LD)

Table 3 High resolution frequencies of A~C haplotypes

Abbreviations: Fq, allele frequencies; n, allele count; SG, STR allele ambiguity groups; ld.dprime, Hedrick's D' statistic normalized measure of linkage disequilibrium (LD)

Table 4 High resolution frequencies of C~B haplotypes

Abbreviations: Fq, allele frequencies; n, allele count; SG, STR allele ambiguity groups; ld.dprime, Hedrick's D' statistic normalized measure of linkage disequilibrium (LD)

Table 5 High resolution frequencies of DQA1~DQB1 haplotypes

Abbreviations: Fq, allele frequencies; n, allele count; SG, STR allele ambiguity groups; ld.dprime, Hedrick's D' statistic normalized measure of linkage disequilibrium (LD)

Table 6 High resolution frequencies of DRB1~DQA1 haplotypes

Abbreviations: Fq, allele frequencies; n, allele count; SG, STR allele ambiguity groups; ld.dprime, Hedrick's D' statistic normalized measure of linkage disequilibrium (LD)

Table 7 High resolution frequencies of DRB1~DQB1 haplotypes

Abbreviations: Fq, allele frequencies; n, allele count; SG, STR allele ambiguity groups; ld.dprime, Hedrick's D' statistic normalized measure of linkage disequilibrium (LD)

Table 8 High resolution frequencies of DPA1~DPB1 haplotypes

Abbreviations: Fq, allele frequencies; n, allele count; SG, STR allele ambiguity groups; ld.dprime, Hedrick's D' statistic normalized measure of linkage disequilibrium (LD)

Table 9 High resolution frequencies of A~C~B~DRB1~DQB1 haplotypes

Abbreviations: Fq, allele frequencies; n, allele count; SG, STR allele ambiguity groups

Table 10 High resolution frequencies of A~C~B~DRB345~DRB1~DQB1 haplotypes

Abbreviations: Fq, allele frequencies; n, allele count; SG, STR allele ambiguity groups

Table 11 High resolution frequencies of A~C~B~DRB345~DRB1~DQA1~DQB1 haplotypes

Abbreviations: Fq, allele frequencies; n, allele count; SG, STR allele ambiguity groups

Table 12 High resolution frequencies of DRB345~DRB1~DQA1~DQB1 haplotypes

Abbreviations: Fq, allele frequencies; n, allele count; SG, STR allele ambiguity groups

Table 13 High resolution frequencies of A~C~B~DRB1~DQB1~DPB1 haplotypes

Abbreviations: Fq, allele frequencies; n, allele count; SG, STR allele ambiguity groups

Table 14 High resolution frequencies of A~C~B~DRB345~DRB1~DQA1~DQB1~DPA1~DPB1 haplotypes

Abbreviations: Fq, allele frequencies; n, allele count; SG, STR allele ambiguity groups