

IMGT/HLA 3.23.0 Reference Release Notes

For use with Assign™
TruSight HLA Analysis Software

May 2016

IMGT/HLA 3.23.0 REFERENCE UPDATE

All alleles were validated for consistency with the IMGT/HLA database except for the following alleles:

- DRB4*01:03:01:02N—Modified to be consistent with the scientific literature¹
- DRB4*03:01N—Removed due to lack of exon 2 reference sequence in the IMGT/HLA database

REGIONS INCLUDED IN THE CORE EXON ANALYSIS

Locus	Region
A	Exon 2, 3, 4 5'UTR, position 200 Intron 1, position 478 Intron 2, positions 774-778, 1008 Intron 4, position 2167
B	Exon 1, 2, 3, 4, 5 5'UTR, position 133 Intron 1, position 461 Intron 4, position 2232
C	Exon 1, 2, 3, 4, 7
DPA1	Exon 2, 3
DPB1	Exon 2, 3
DQA1	Exon 2, 3
DQB1	Exon 2, 3
DRB1, DRB3, DRB5	Exon 2, 3
DRB4	Exon 2, 3 Intron 1, position 9977

¹ Immunogenetics 31: 112-117, 1990

BASE POSITIONS MASKED FOR VARIANT CALLING

Locus	Region
A	None
B	None
C	Intron 6, position 2957
DPA1	None
DPB1	Intron 2, positions 9094-9150, 9154-9156, 9175-9240
DQA1	5'UTR position 378-422 Intron 1 position 2010-2213, 3943-3946, 4199-4207 Intron 3 position 5722-5729 3'UTR position 6504-6510
DQB1	5'UTR position 254-258, 350-352 Intron 1 position 852-888 Intron 2 position 3190-3227, 3801-3852, 5020-5022
DQB1G06	Intron 1 position 867-871 Intron 2 position 4589-4591, 4489-4491, 4629-4631 Exon 3 position 5020-5022
DRB1G01	Intron 2 position 6333-6409
DRB1G03	Intron 1 position 8231-8252 Intron 2 position 9063-9128
DRB1G04	Intron 2 position 9290-9349
DRB1G07	Intron 2 position 11341-11388
DRB3	Intron 2 position 8451-8531
DRB4	None
DRB5	Intron 2 position 8710-8758

CWD 3.23 UPDATE

All alleles in the CWD list supplied by the Immunogenetics Data Analysis Working Group, which have identical entries in the relevant IMGT database release, are included in the Assign TruSight HLA CWD list. In addition, when CWD alleles have been split into subgroups subsequent to the most recent CWD list, all alleles in the subgroups are included in the Assign TruSight HLA CWD list.