consensus HLA Report

Patient HCC1954

13 July, 2022

This HLA report was generated using the consHLA toolkit on 13 July, 2022.

Summary of Clinically Relevant HLA Consensus Alleles

Class-I

HLA-A	HLA-B	HLA-C
33:03	40:06	15:02
24:02	No consensus	04:01

Class-II

HLA-DRA	HLA-DRB1	HLA-DRB3	HLA-DRB4	HLA-DRB5
01:01	16:02	Not typed	01:03	02:02
01:01	04:03	Not typed	01:03	02:02

HLA-DQA1	HLA-DQB1	HLA-DPA1	HLA-DPB1
01:02	05:02	01:03	09:01
03:01	03:02	02:01	04:01

Consensus Alleles

HLA-A 33:03:01 24:02:01 HLA-B 40:06:01 No consensus HLA-C 15:02:01 04:01:01 HLA-DRA 01:01:01 01:01:01 HLA-DRB1 16:02:01 04:03:01 HLA-DRB3 Not typed Not typed HLA-DRB4 01:03:01 01:03:01 HLA-DRB5 02:02 02:02 HLA-DQA1 01:02:02 03:01:01 HLA-DQB1 05:02:01 03:02:01 HLA-DQB1 05:02:01 03:02:01 HLA-DQB1 05:02:01 03:02:01 HLA-DQB1 01:03:01 02:01:01 HLA-DPB1 09:01:01 01:01:01 HLA-DMB 01:01:01 01:01:01 HLA-DMB 01:01:01 01:01:01 HLA-DOA 01:01:01 01:01:01 HLA-DRB2 Not typed Not typed HLA-DRB6 Not typed Not typed HLA-DRB7 01:01:01 01:01:01 HLA-B 01:03:01 01:01:01 <t< th=""><th></th><th></th><th></th></t<>			
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HLA-DRA 01:01:01 01:01:01 HLA-DRB1 16:02:01 04:03:01 HLA-DRB3 Not typed Not typed HLA-DRB4 01:03:01 01:03:01 HLA-DRB5 02:02 02:02 HLA-DQA1 01:02:02 03:01:01 HLA-DQB1 05:02:01 03:02:01 HLA-DPA1 01:03:01 02:01:01 HLA-DPB1 09:01:01 04:01:01 HLA-DMA 01:01:01 01:01:01 HLA-DMB 01:01:01 01:01:01 HLA-DOA 01:01:02 01:01:02 HLA-DOB 01:01:01 01:01:01 HLA-DRB2 Not typed Not typed HLA-DRB6 Not typed Not typed HLA-DRB7 01:01:01 01:01:01 HLA-DRB8 01:01 01:01 HLA-DRB8 Not typed Not typed HLA-DRB8 01:01 01:01 HLA-DRB9 Not typed Not typed HLA-DRB9 Not typed Not typed HLA-E 01:03:01 01:01:01 HLA-F 01:01:01 01:01:01 HLA-G 01:01:01 01:01:01 HLA-G 01:01:01 01:01:01 HLA-H 01:02 01:02 HLA-J 01:01:01 01:01:01 HLA-K 01:03 No consensus HLA-L 01:02 01:02	HLA-B	40:06:01	No consensus
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HLA-DRB4 01:03:01 01:03:01 HLA-DRB5 02:02 02:02 HLA-DQA1 01:02:02 03:01:01 HLA-DQB1 05:02:01 03:02:01 HLA-DPA1 01:03:01 02:01:01 HLA-DPB1 09:01:01 04:01:01 HLA-DMA 01:01:01 01:01:01 HLA-DMB 01:01:01 01:01:01 HLA-DOA 01:01:02 01:01:02 HLA-DOB 01:01:01 01:01:01 HLA-DRB2 Not typed Not typed HLA-DRB6 Not typed Not typed HLA-DRB7 01:01:01 01:01:01 HLA-DRB8 01:01 01:01 HLA-DRB8 01:01 01:01 HLA-DRB9 Not typed Not typed HLA-DRB9 Not typed Not typed HLA-DRB0 01:01:01 01:01:01 HLA-DRB9 Not typed Not typed HLA-DRB9 Not typed Not typed HLA-E 01:03:01 01:01:01 HLA-F 01:01:01 01:01:01 HLA-G 01:01:01 01:01:01 HLA-G 01:01:01 01:04 HLA-H 01:02 01:02 HLA-L 01:03 No consensus HLA-L 01:02 01:02	HLA-DRB1	16:02:01	04:03:01
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HLA-DPB1 09:01:01 04:01:01 HLA-DMA 01:01:01 01:01:01 HLA-DMB 01:01:01 01:01:01 HLA-DOA 01:01:02 01:01:02 HLA-DOB 01:01:01 01:01:01 HLA-DRB2 Not typed Not typed HLA-DRB6 Not typed Not typed HLA-DRB7 01:01:01 01:01:01 HLA-DRB8 01:01 01:01 HLA-DRB9 Not typed Not typed HLA-E 01:03:01 01:01:01 HLA-F 01:01:01 01:01:03 HLA-G 01:01:01 01:04 HLA-H 01:02 01:02 HLA-J 01:01:01 01:01:01 HLA-K 01:03 No consensus HLA-L 01:02 01:02	HLA-DQB1	05:02:01	03:02:01
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HLA-DRB6 Not typed Not typed HLA-DRB7 01:01:01 01:01:01 HLA-DRB8 01:01 01:01 HLA-DRB9 Not typed Not typed HLA-E 01:03:01 01:01:01 HLA-F 01:01:01 01:01:03 HLA-G 01:01:01 01:04 HLA-H 01:02 01:02 HLA-J 01:01:01 01:01:01 HLA-K 01:03 No consensus HLA-L 01:02 01:02	HLA-DOB	01:01:01	01:01:01
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HLA-J 01:01:01 01:01:01 HLA-K 01:03 No consensus HLA-L 01:02 01:02	HLA-G	01:01:01	01:04
HLA-K 01:03 No consensus HLA-L 01:02 01:02	HLA-H	01:02	01:02
HLA-L 01:02 01:02	HLA-J	01:01:01	01:01:01
	HLA-K	01:03	No consensus
HLA-V 01:01:01 01:01:01		01:02	01:02
	HLA-V	01:01:01	01:01:01

Appendix

HLA Typing Method

The consensus HLA typing module uses HLA-HD (v1.4.0) to conduct HLA typing from Tumour and Germline WGS and Tumour RNAseq (optional) for a given patient, producing two or three sets of candidate alleles. For each typed HLA gene, a pair of consensus alleles is calculated based on concordance between the candidate allele sets.

The first page of the HLA report displays a 'clinically significant' subset of HLA alleles in a format which mimics that of a clinical HLA report and is therefore familiar to clinicians. The 'clinically significant' HLA subset includes most of the protein coding Class I and II HLA genes which are implicated in peptide presentation to T cells while excluding HLA Class I pseudogenes (HLA-H, -J, -K, -L, -V), non-classical Class I genes (HLA-E, -F, -G), Class II pseudogenes (HLA-DRB2, -DRB6, -DRB7, -DRB8, and -DRB9), and the non-classical Class II genes (HLA-DOA, -DOB, -DMA and -DMB). The second page of the report displays a table of all HLA alleles typed by the consHLA module (using HLA-HD), including the clinically relevant subset which is highlighted in bold text.