

Supplementary Table S3: Comparison of HLA types in positive controls with known types in literature

HLA locus	NA10859 (1347-02) ^a	NA10859 (1347-02)	NA10859 (1347-02)	NA12878 (1463-02)	NA12878 (1463-02)	NA12878 (1463-02)	NA24385 (HG002 (NIST RM 8391))	NA24385 (HG002 (NIST RM 8391))	NA24385 (HG002 (NIST RM 8391))
	Reference Genotype	No of replicates	Accuracy(%)/ Call rate(%) ^d	Reference Genotype	No of replicates	Accuracy(%)/ Call rate(%)	Reference Genotype	No of replicates	Accuracy(%)/ Call rate(%)
A	03:01/01:01 ^b	4	100/100	01:01/11:01 ^e	587	100/100	26:01/01:01 ^f	75	100/100
B	07:02/15:01 ^b	4	100/100	08:01/56:01 ^e	587	100/100	38:01/35:08 ^f	75	-
C	06:02/07:02 ^b	4	100/100	01:02/07:01 ^e	587	100/100	12:03/04:01 ^f	75	100/100
DPA1	01:03/01:03 ^b	4	100/100	01:03/02:01 ^e	587	100/100	01:03/01:03 ^f	75	100/100
DPB1	04:02/04:02 ^b	4	100/100	04:01/14:01 ^e	587	100/100	04:01/04:01 ^g	75	100/100
DQA1	01:02/03:01 ^b	4	100/100	01:01/05:01 ^e	587	100/100	03:01/01:01 ^h	75	100/100
DQB1	03:02/06:02 ^b	4	100/100	02:01/05:01 ^e	587	100/100	05:01/03:02 ^f	75	100/100
DRB1	04:01/15:01 ^b	4	100/100	01:01/03:01 ^e	587	100/100	04:02/10:01 ^f	75	100/100
DRB3	NA ^{b,c}	4	-	01:01/01:01;01:01/02:02 ^e	587	100/100	NA ^f	75	-
DRB4	01 ^b	4	100/100	01:01/01:01;01:03/01:03;01:06/01:06 ^e	587	-	01:03 ^f	75	100/100
DRB5	NA ^{b,c}	4	-	NA ^e	587	-	NA ^f	75	-

Note: a- Coriell ID (CEPH Family ID or NIST ID/RM Number for Personal Genome Project sample)

b: reference genotype source-IPD-IMGT/HLADatabase

c: reference genotype data is not available

d: call rate is based on a posterior probability call threshold of 0.7

e: reference genotype source-PLoS Comput Biol. 2016 Oct; 12(10): e1005151. PMID: 27792722. A set of possible alleles are reported in the reference. The HLA types we validated are shown in the table.

f: reference genotype source-DOI: 10.12688/f1000research.19630.1

g: reference genotype source-DOI: 10.12688/f1000research.19630.1 and <https://www.pacb.com/wp-content/uploads/Rowell-CSHLBioData-2018-Comprehensive-Variant-Detection-in-a-Human-Genome-with-PacBio-High-Fidelity-Reads.pdf>. The HLA types we validated are shown in the table.

h: reference genotype source-DOI: 10.12688/f1000research.19630.1 and Nature Communications doi: 10.1038/s41467-020-18564-9. The HLA types we validated are shown in the table.