Locus: HLA-A

Resolution: 4th field

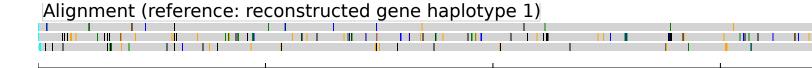
Full typing result:

HLA-A*02:200

bam coverage

0.0kb

variants



2.0kb

3.0kb

HLA-A*02:200 (identity: 99.97%)

1.0kb

Locus: HLA-B

Resolution: 4th field

Full typing result:

HLA-B*07:02:01:01

bam coverage

variants

HLA-B*07:02:01:01 (identity: 100.00%)

Locus: HLA-B

Resolution: 4th field

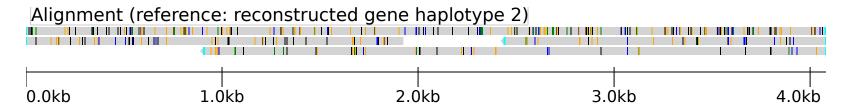
Full typing result:

HLA-B*18:01:01:01

bam coverage

 \square $\frac{3}{2}$

variants



HLA-B*18:01:01:01 (identity: 99.98%)

Locus: HLA-C

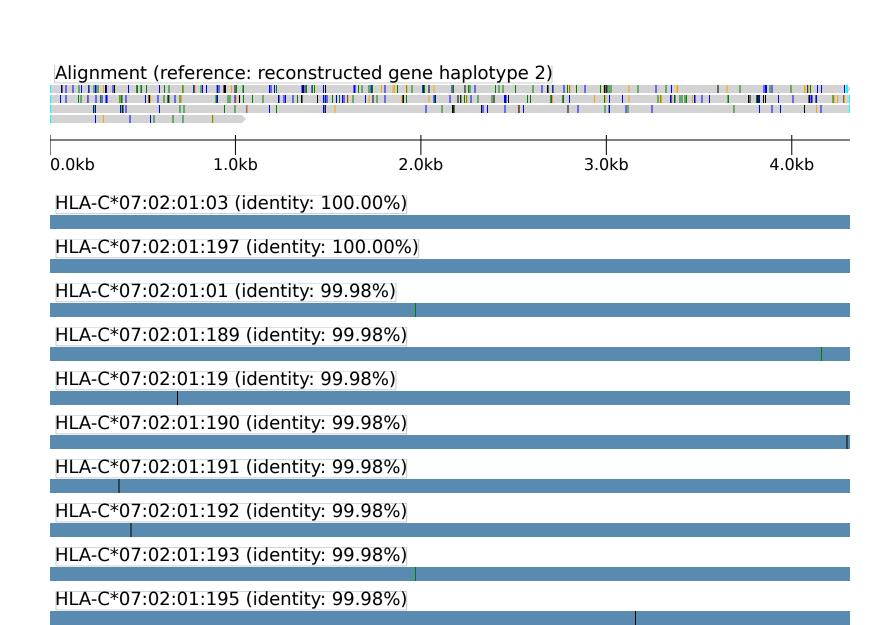
Resolution: 4th field

Full typing result:

HLA-C*07:02:01:03	HLA-C*07:02:01:197	HLA-C*07:02:01:01
	1	
HLA-C*07:02:01:189	HLA-C*07:02:01:19	HLA-C*07:02:01:190
	1	1
HLA-C*07:02:01:191	HLA-C*07:02:01:192	HLA-C*07:02:01:193
	7	
HLA-C*07:02:01:195		

bam coverage

variants



Locus: HLA-C

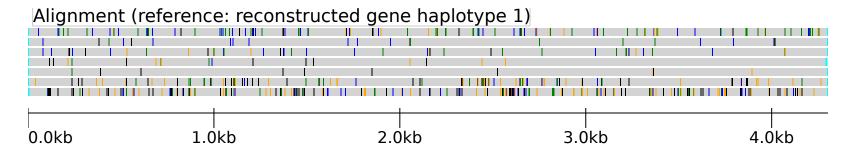
Resolution: 4th field

Full typing result:

HLA-C*05:01:74

bam coverage

variants



HLA-C*05:01:01:01 (identity: 99.98%)

HLA-C*05:01:01:02 (identity: 99.95%)

HLA-C*05:01:01:82 (identity: 99.95%)

HLA-C*05:01:74 (identity: 99.95%)

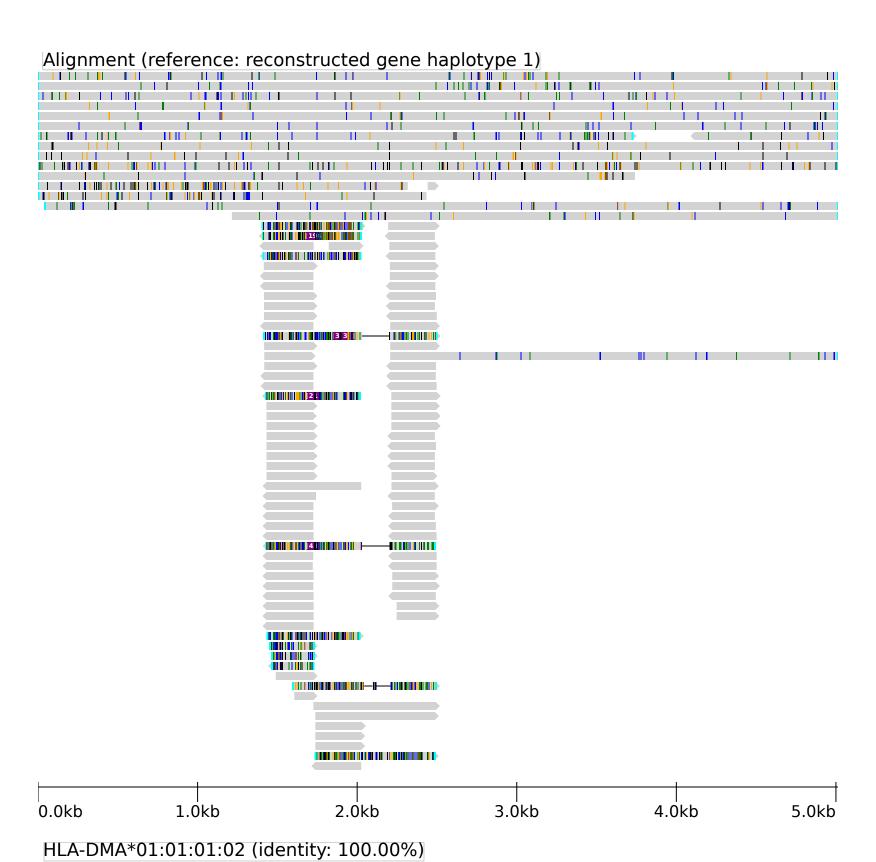
Sample: HG01257 Locus: HLA-DMA

Resolution: 4th field

Full typing result:

HLA-DMA*01:01:01:02





Locus: HLA-DMB

Resolution: 4th field

Full typing result:

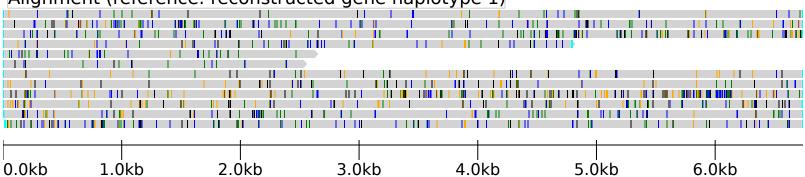
HLA-DMB*01:03:01:17 | HLA-DMB*01:03:01:02 | HLA-DMB*01:03:01:18

HLA-DMB*01:03:01:04

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 1)



HLA-DMB*01:03:01:17 (identity: 100.00%)

HLA-DMB*01:03:01:02 (identity: 99.99%)

HLA-DMB*01:03:01:18 (identity: 99.99%)

HLA-DMB*01:03:01:04 (identity: 99.97%)

Locus: HLA-DOA

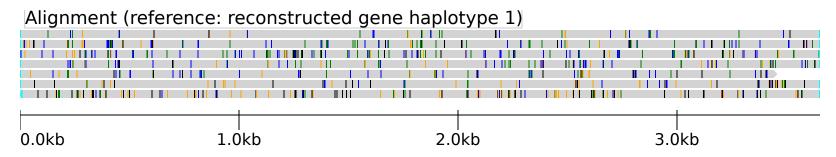
Resolution: 4th field

Full typing result:

HLA-DOA*01:01:04:01

bam coverage

variants



HLA-DOA*01:01:04:01 (identity: 100.00%)

Locus: HLA-DOA

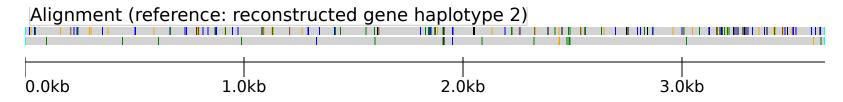
Resolution: 4th field

Full typing result:

HLA-DOA*01:01:02:03

bam coverage

variants



HLA-DOA*01:01:02:03 (identity: 100.00%)

Locus: HLA-DOB

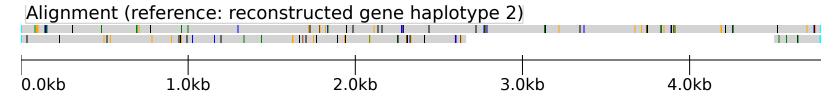
Resolution: 4th field

Full typing result:

HLA-DOB*01:03:01:02

bam coverage

variants



HLA-DOB*01:03:01:02 (identity: 100.00%)

Locus: HLA-DOB

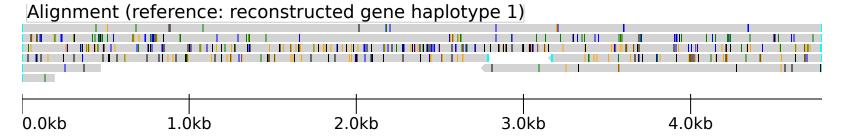
Resolution: 4th field

Full typing result:

HLA-DOB*01:01:03:09 | HLA-DOB*01:01:03:02 | HLA-DOB*01:01:28

bam coverage

variants



HLA-DOB*01:01:03:09 (identity: 100.00%)

HLA-DOB*01:01:03:02 (identity: 99.98%)

HLA-DOB*01:01:01:28 (identity: 99.98%)

Locus: HLA-DPA1

Resolution: 4th field

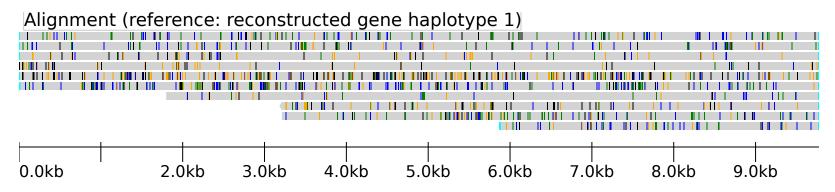
Full typing result:

HLA-DPA1*01:03:01:01

bam coverage

— 6

variants



HLA-DPA1*01:03:01:01 (identity: 100.00%)

Locus: HLA-DPA1

Resolution: 4th field

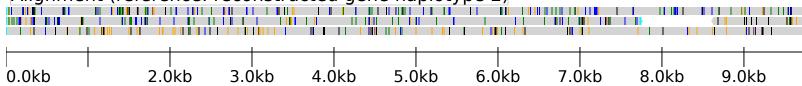
Full typing result:

HLA-DPA1*01:03:01:05 | HLA-DPA1*01:03:01:15 | HLA-DPA1*01:03:01:74

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 2)



HLA-DPA1*01:03:01:05 (identity: 99.99%)

HLA-DPA1*01:03:01:15 (identity: 99.98%)

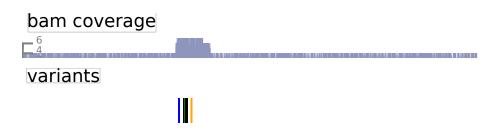
HLA-DPA1*01:03:01:74 (identity: 99.98%)

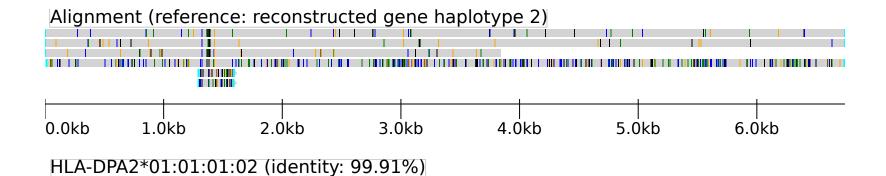
Locus: HLA-DPA2

Resolution: 4th field

Full typing result:

HLA-DPA2*01:01:01:02





Locus: HLA-DPA2

Resolution: 4th field

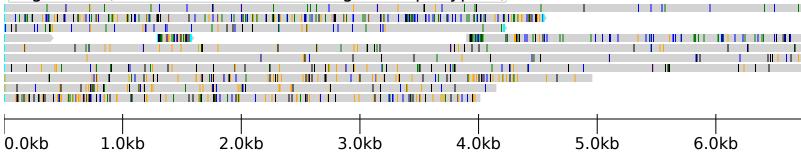
Full typing result:

HLA-DPA2*02:01:01:01

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 1)



HLA-DPA2*02:01:01:01 (identity: 100.00%)

Locus: HLA-DPB1

Resolution: 4th field

Full typing result:

HLA-DPB1*02:02:01:01 HLA-DPB1*02:02:01:05 HLA-DPB1*02:02:01:04

HLA-DPB1*02:02:03 HLA-DPB1*1188:01 HLA-DPB1*1376:01

HLA-DPB1*1403:01 HLA-DPB1*02:02:01:09 HLA-DPB1*47:01:01:01

HLA-DPB1*48:01 HLA-DPB1*02:01:02:04 HLA-DPB1*112:01:01:02

HLA-DPB1*02:01:02:05 HLA-DPB1*02:01:02:01 HLA-DPB1*71:01:01

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 1)

0.0kb 2.5kb 3.75kb 5.0kb 6.25kb 7.5kb 8.75kb 10.0kb

HLA-DPB1*02:02:01:01 (identity: 100.00%)

HLA-DPB1*02:02:01:05 (identity: 99.97%)

HLA-DPB1*02:02:01:04 (identity: 99.97%)

HLA-DPB1*02:02:03 (identity: 99.99%)

HLA-DPB1*1188:01 (identity: 99.99%)

HLA-DPB1*1376:01 (identity: 99.99%)

HLA-DPB1*1403:01 (identity: 99.99%)

HLA-DPB1*02:02:01:09 (identity: 99.96%)

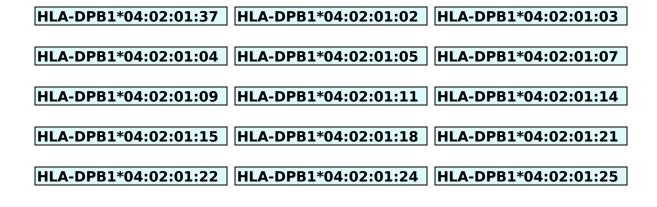
HLA-DPB1*47:01:01:01 (identity: 99.96%)

HLA-DPB1*48:01 (identity: 99.95%)

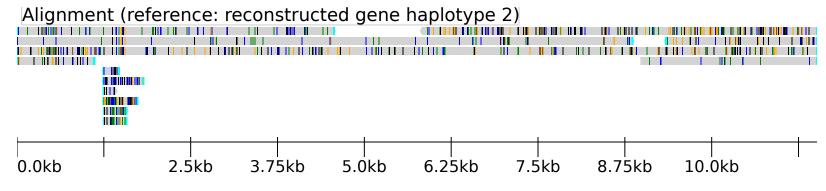
Locus: HLA-DPB1

Resolution: 4th field

Full typing result:



bam coverage variants



HLA-DPB1*04:02:01:37 (identity: 99.93%)

HLA-DPB1*04:02:01:02 (identity: 99.92%)

HLA-DPB1*04:02:01:03 (identity: 99.91%)

HLA-DPB1*04:02:01:04 (identity: 99.91%)

HLA-DPB1*04:02:01:05 (identity: 99.91%)

HLA-DPB1*04:02:01:07 (identity: 99.91%)

HLA-DPB1*04:02:01:09 (identity: 99.91%)

HLA-DPB1*04:02:01:11 (identity: 99.91%)

HLA-DPB1*04:02:01:14 (identity: 99.91%)

HLA-DPB1*04:02:01:15 (identity: 99.87%)

Sample: HG01257 Locus: HLA-DPB2 Resolution: 4th field Full typing result: HLA-DPB2*03:01:01:02 bam coverage variants Alignment (reference: reconstructed gene haplotype 2)

10.0kb

12.5kb

17.5kb

15.0kb

HLA-DPB2*03:01:01:02 (identity: 99.96%)

5.0kb

7.5kb

2.5kb

0.0kb

Sample: HG01257 Locus: HLA-DPB2 Resolution: 4th field Full typing result: HLA-DPB2*01:01:02 bam coverage variants Alignment (reference: reconstructed gene haplotype 1) Alignment (reference: reconstructed gene haplotype 1) Ш III Ш III 0.0kb 2.5kb 5.0kb 7.5kb 10.0kb 12.5kb 15.0kb HLA-DPB2*01:01:02 (identity: 99.99%)

Locus: HLA-DQA1

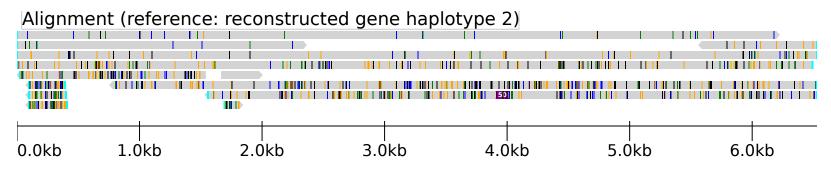
Resolution: 4th field

Full typing result:

HLA-DQA1*05:01:01:01

bam coverage

variants



HLA-DQA1*05:01:01:01 (identity: 99.98%)

Locus: HLA-DQA1

Resolution: 4th field

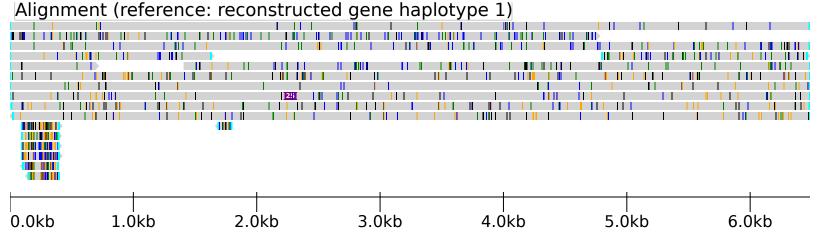
Full typing result:

HLA-DQA1*01:05:01:01

bam coverage

variants

Alignment (reference, reconstructed gone bankstyne 1)



HLA-DQA1*01:05:01:01 (identity: 100.00%)

Locus: HLA-DQA2

Resolution: 4th field

Full typing result:

HLA-DQA2*01:04:01:02

bam coverage

L 24

variants



Alignment (reference: reconstructed gene haplotype 1)

0.0kb 1.0kb 2.0kb 3.0kb 4.0kb 5.0kb

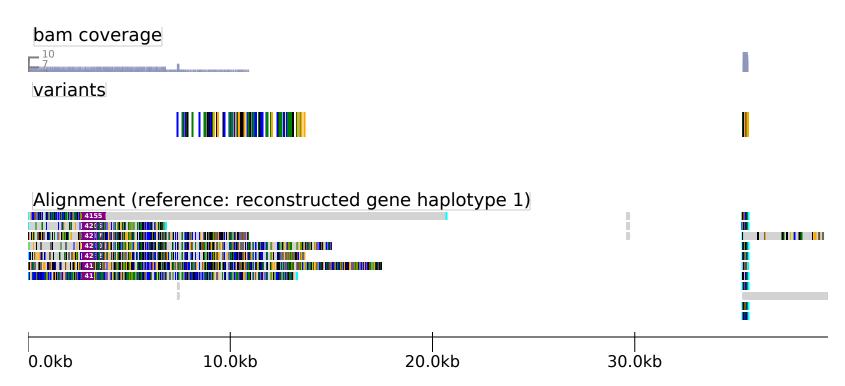
HLA-DQA2*01:04:01:02 (identity: 99.98%)

Locus: HLA-DQB1

Resolution: 4th field

Full typing result:

HLA-DQB1*02:01:01:12



HLA-DQB1*02:01:01:12 (identity: 100.00%)

Locus: HLA-DQB1

Resolution: 4th field

Full typing result:

HLA-DQB1*05:01:01:05

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 2) 0.0kb 1.0kb 2.0kb 3.0kb 4.0kb 5.0kb 6.0kb 7.0kb

HLA-DQB1*05:01:01:05 (identity: 100.00%)

Locus: HLA-DRA

Resolution: 4th field

Full typing result:

HLA-DRA*01:01:05 | HLA-DRA*01:01:01:01 | HLA-DRA*01:01:08

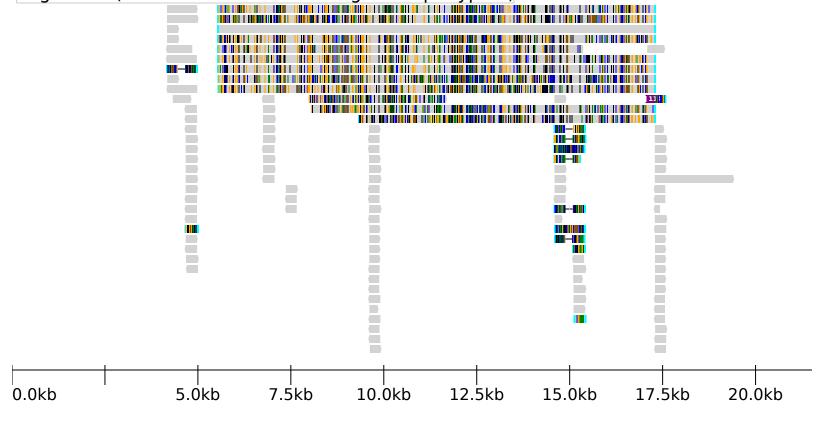
bam coverage

□ 30 20

variants



Alignment (reference: reconstructed gene haplotype 1)



HLA-DRA*01:01:05 (identity: 91.17%)

HLA-DRA*01:01:01:01 (identity: 91.19%)

HLA-DRA*01:01:01:08 (identity: 91.17%)

Locus: HLA-DRA

Resolution: 4th field

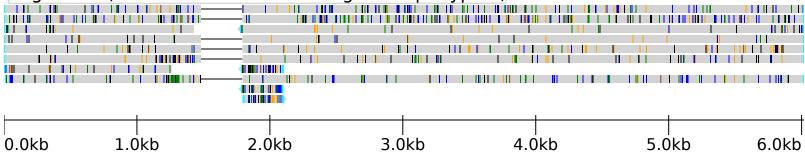
Full typing result:

HLA-DRA*01:01:01:11









HLA-DRA*01:01:01:11 (identity: 94.59%)

Sample: HG01257 Locus: HLA-DRB1 Resolution: 4th field Full typing result:

HLA-DRB1*03:01:01:03 | HLA-DRB1*03:01:01:02 | HLA-DRB1*03:01:01:01 HLA-DRB1*03:01:01:06 | HLA-DRB1*03:01:01:13 | HLA-DRB1*03:01:01:21 | HLA-DRB1*03:01:01:14 | HLA-DRB1*03:01:01:17 | HLA-DRB1*03:01:01:05 HLA-DRB1*14:06:01

bam coverage

variants Alignment (reference: reconstructed gene haplotype 2)

Alignment (reference: reconstructed gene haplotype 2) 0.0kb 2.5kb 3.75kb 5.0kb 6.25kb 7.5kb 8.75kb 10.0kb 12.5kb HLA-DRB1*03:01:01:03 (identity: 90.91%) 318 HLA-DRB1*03:01:01:02 (identity: 90.84%) 318 22 HLA-DRB1*03:01:01:01 (identity: 90.92%) 318 HLA-DRB1*03:01:01:06 (identity: 90.75%) 318 HLA-DRB1*03:01:01:13 (identity: 90.75%) 318 22 HLA-DRB1*03:01:01:21 (identity: 90.80%) 318 HLA-DRB1*03:01:01:14 (identity: 90.81%)

318 HLA-DRB1*03:01:01:17 (identity: 90.81%) 318 HLA-DRB1*03:01:01:05 (identity: 90.81%) 318 HLA-DRB1*14:06:01 (identity: 90.92%)

318

Locus: HLA-DRB1 Resolution: 4th field Full typing result: HLA-DRB1*10:01:01:03 bam coverage **■** 57 38 variants Alignment (reference: reconstructed gene haplotype 1) 31.7 17 0.0kb 3.75kb 2.5kb 5.0kb 6.25kb 7.5kb 8.75kb 11.25kb 13.75kb HLA-DRB1*10:01:01:03 (identity: 99.99%)

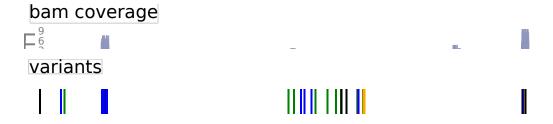
Sample: HG01257

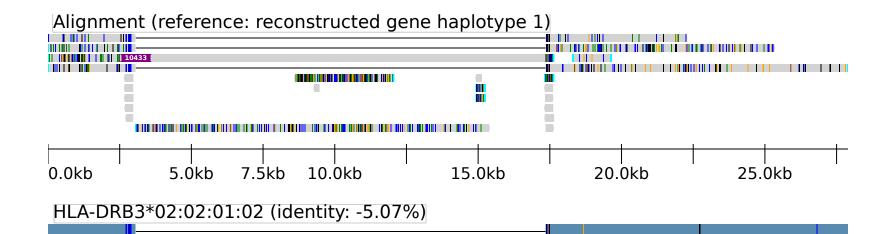
Locus: HLA-DRB3

Resolution: 4th field

Full typing result:

HLA-DRB3*02:02:01:02





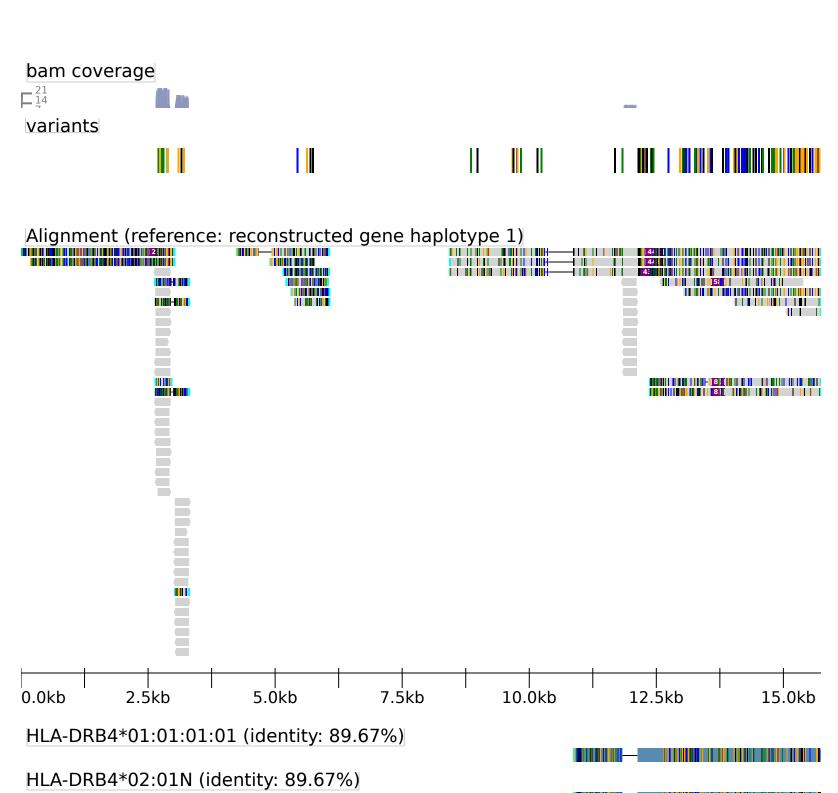
Locus: HLA-DRB4

Resolution: 4th field

Full typing result:



HLA-DRB4*01:01:12 (identity: 89.65%)



Sample: HG01257 Locus: HLA-E Resolution: 4th field Full typing result: HLA-E*01:01:01:03 HLA-E*01:01:01:49 HLA-E*01:01:01:01 HLA-E*01:01:01:52 HLA-E*01:01:01:53 HLA-E*01:01:02 HLA-E*01:03:01:01 HLA-E*01:118 | HLA-E*01:125 HLA-E*01:01:01:14 HLA-E*01:01:36 HLA-E*01:01:37 HLA-E*01:01:39 HLA-E*01:01:41 HLA-E*01:01:42 bam coverage **■** 50 33 variants Alignment (reference: reconstructed gene haplotype 1) -1111 11 1 ANT NET TO THE PERSON OF THE P 35 | 0.0kb 2.5kb 3.75kb 5.0kb 6.25kb 7.5kb 8.75kb 10.0kb HLA-E*01:01:01:01 (identity: -101.60%) HLA-E*01:01:01:03 (identity: -101.62%) HLA-E*01:01:01:49 (identity: -101.62%) HLA-E*01:01:52 (identity: -101.62%) HLA-E*01:01:01:53 (identity: -101.62%) HLA-E*01:01:02 (identity: -101.62%) HLA-E*01:03:01:01 (identity: -101.62%) -||||| HLA-E*01:118 (identity: -101.62%) HLA-E*01:125 (identity: -101.62%) HLA-E*01:01:14 (identity: -103.38%)

-|||||

Locus: HLA-F

Resolution: 4th field

Full typing result:

HLA-F*01:01:01:01

bam coverage

variants

HLA-F*01:01:01:01 (identity: 100.00%)

Locus: HLA-F

Resolution: 4th field

Full typing result:

HLA-F*01:03:01:01

bam coverage

variants

HLA-F*01:03:01:01 (identity: 99.94%)

Locus: HLA-G

Resolution: 4th field

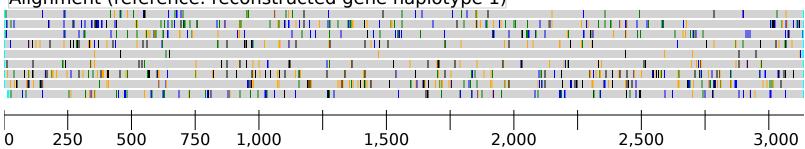
Full typing result:

HLA-G*01:01:01:05

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 1)



HLA-G*01:01:05 (identity: 100.00%)

Locus: HLA-G

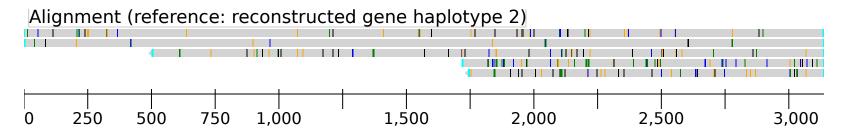
Resolution: 4th field

Full typing result:

HLA-G*01:01:01:01

bam coverage

variants



HLA-G*01:01:01 (identity: 100.00%)

Locus: HLA-H

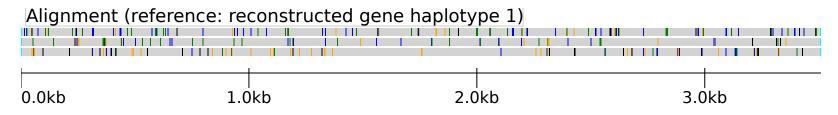
Resolution: 4th field

Full typing result:

HLA-H*02:04:01

bam coverage

variants



HLA-H*02:04:01 (identity: 100.00%)

Locus: HLA-H

Resolution: 4th field

Full typing result:

HLA-H*01:01:01:03



variants

Alignment (reference: reconstructed gene haplotype 2)



HLA-H*01:01:03 (identity: -54.67%)

Locus: HLA-J

Resolution: 4th field

Full typing result:

HLA-J*01:01:01:06

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 2)

0.0kb 1.0kb 2.0kb 3.0kb

HLA-J*01:01:06 (identity: 99.94%)

Locus: HLA-J

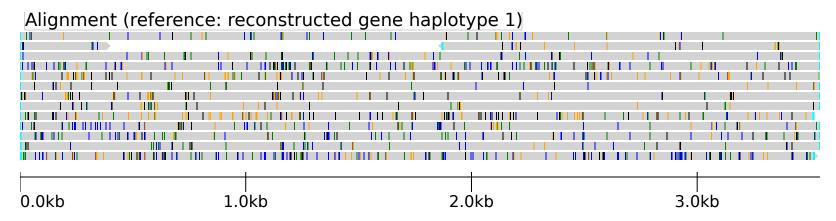
Resolution: 4th field

Full typing result:

HLA-J*01:01:04

bam coverage

variants



HLA-J*01:01:04 (identity: 100.00%)

Locus: HLA-K

Resolution: 4th field

Full typing result:

HLA-K*01:01:01:01

bam coverage

variants

HLA-K*01:01:01 (identity: 100.00%)

Locus: HLA-L

Resolution: 4th field

Full typing result:

HLA-L*01:01:02

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 2)

0.0kb 1.0kb 2.0kb 3.0kb

HLA-L*01:01:02 (identity: 99.95%)

Locus: HLA-L

Resolution: 4th field

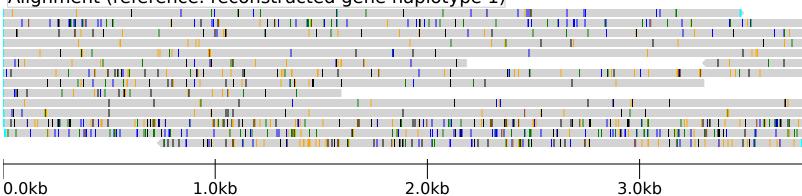
Full typing result:

HLA-L*01:01:01:03

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 1)



HLA-L*01:01:03 (identity: 100.00%)

Locus: HLA-P

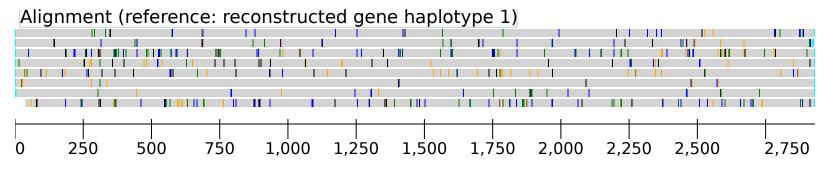
Resolution: 4th field

Full typing result:

HLA-P*02:01:01:02

bam coverage

variants



HLA-P*02:01:01:02 (identity: 100.00%)

Locus: HLA-U

Resolution: 4th field

Full typing result:

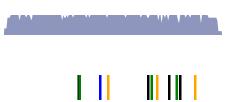
HLA-U*01:03

bam coverage

7

0

variants

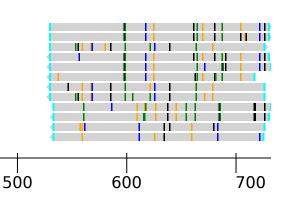


Alignment (reference: reconstructed gene haplotype 1)

300

400

200



HLA-U*01:03 (identity: 69.26%)

100

Locus: HLA-U

Resolution: 4th field

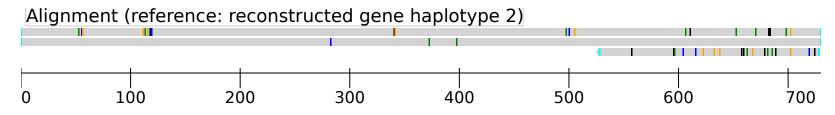
Full typing result:

HLA-U*01:04

bam coverage

<u></u> 3

variants



HLA-U*01:04 (identity: 100.00%)

Locus: HLA-W

Resolution: 4th field

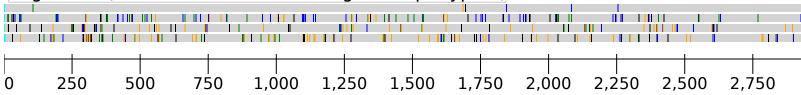
Full typing result:

HLA-W*03:01:01:01 HLA-W*03:01:01:02

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 1)



HLA-W*03:01:01:01 (identity: 100.00%)

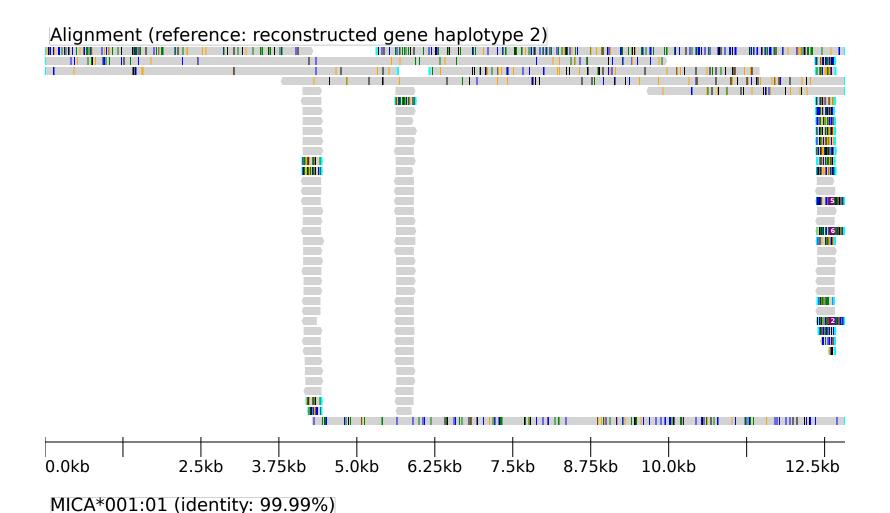
HLA-W*03:01:01:02 (identity: 99.97%)

Sample: HG01257 Locus: MICA Resolution: 4th field Full typing result: MICA*008:04:01 bam coverage variants Alignment (reference: reconstructed gene haplotype 1) 0.0kb 2.5kb 5.0kb 7.5kb 10.0kb 12.5kb 17.5kb 15.0kb MICA*008:04:01 (identity: 100.00%)

Sample: HG01257 Locus: MICA Resolution: 4th field

Full typing result:

MICA*001:01



Locus: MICB Resolution: 4th field Full typing result: MICB*052 bam coverage **□** 132 variants Alignment (reference: reconstructed gene haplotype 1) Alignment (reference: reconstructed gene naplotype 1) ĪIII IIII TITLE OF **III** Ш 2.5kb 6.25kb 0.0kb 3.75kb 5.0kb 7.5kb 8.75kb 10.0kb 12.5kb MICB*052 (identity: 99.85%)

Sample: HG01257

Locus: MICB Resolution: 4th field Full typing result: MICB*005:02:01 bam coverage 135 90 variants Alignment (reference: reconstructed gene haplotype 2) Alignment (reference: reconstructed gene naplotype 2) 111111 0.0kb 5.0kb 2.5kb 3.75kb 6.25kb 7.5kb 8.75kb 10.0kb 12.5kb MICB*005:02:01 (identity: 99.74%)

Sample: HG01257

Locus: TAP1

Resolution: 4th field

Full typing result:

TAP1*01:01:01:02

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 1)

0.0kb 2.0kb 3.0kb 4.0kb 5.0kb 6.0kb 7.0kb 8.0kb 9.0kb

TAP1*01:01:01:02 (identity: 99.99%)

Locus: TAP1

Resolution: 4th field

Full typing result:

TAP1*01:01:01:04

bam coverage

variants

TAP1*01:01:01:04 (identity: 100.00%)

Locus: TAP2

Resolution: 4th field

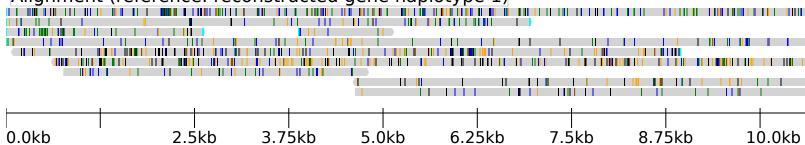
Full typing result:

TAP2*01:01:03:03



variants

Alignment (reference: reconstructed gene haplotype 1)



TAP2*01:01:03:03 (identity: 99.99%)

Locus: TAP2

Resolution: 4th field

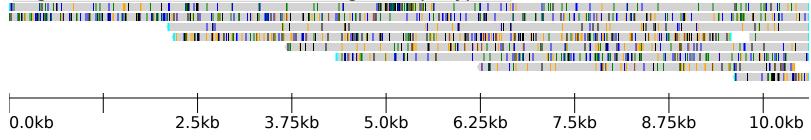
Full typing result:

TAP2*01:01:07:05



variants

Alignment (reference: reconstructed gene haplotype 2)



TAP2*01:01:07:05 (identity: 99.98%)