Locus: HFE

Resolution: 4th field

Full typing result:

HFE\*001:01:03 HFE\*001:01:02

bam coverage

 $\mathbf{L}_{\frac{3}{2}}^{3}$ 

variants

Alignment (reference: reconstructed gene haplotype 1)



HFE\*001:01:03 (identity: 93.81%)

HFE\*001:01:02 (identity: 93.77%)

**Locus: HFE** 

Resolution: 4th field

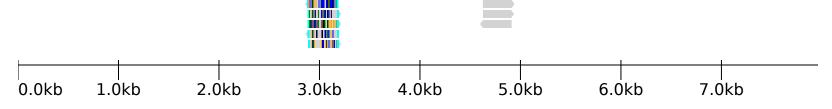
#### Full typing result:

HFE\*001:01:01 HFE\*001:01:03

#### bam coverage

Variants

Alignment (reference: reconstructed gene haplotype 2)



HFE\*001:01:01 (identity: 100.00%)

HFE\*001:01:03 (identity: 100.00%)

Locus: HLA-A

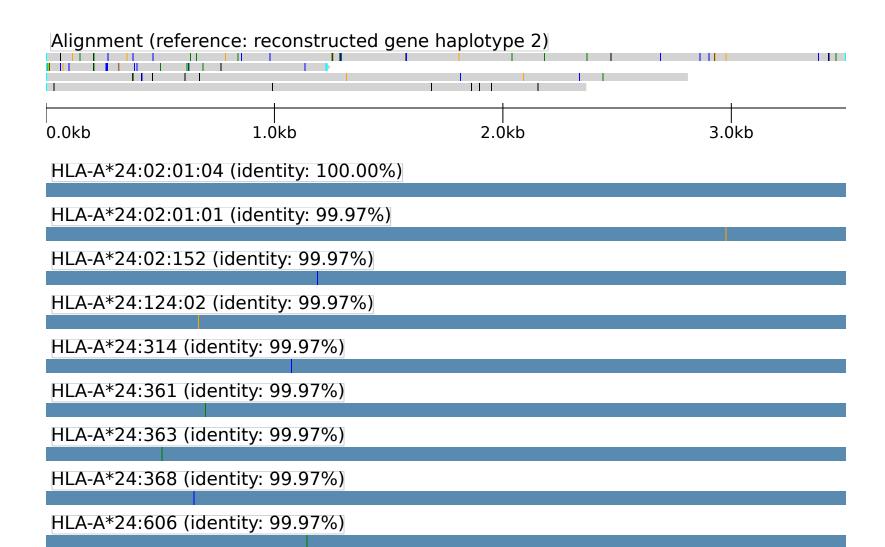
Resolution: 4th field

#### Full typing result:

HLA-A\*24:02:01:04 HLA-A\*24:02:01:01 HLA-A\*24:02:152
HLA-A\*24:124:02 HLA-A\*24:314 HLA-A\*24:361
HLA-A\*24:363 HLA-A\*24:368 HLA-A\*24:606

bam coverage

variants



**Locus: HLA-A** 

Resolution: 4th field

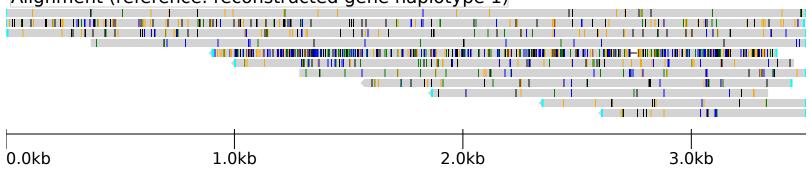
Full typing result:

HLA-A\*24:02:01:79 HLA-A\*24:02:01:01

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 1)



HLA-A\*24:02:01:79 (identity: 99.97%)

HLA-A\*24:02:01:01 (identity: 99.94%)

Locus: HLA-B

Resolution: 4th field

#### Full typing result:

#### bam coverage

| variants

Alignment (reference: reconstructed gene haplotype 1)

0.0kb 1.0kb 2.0kb 3.0kb 4.0kb

HLA-B\*51:01:01:01 (identity: 100.00%)

HLA-B\*51:329Q (identity: 99.56%)

HLA-B\*51:01:01:03 (identity: 99.98%)

HLA-B\*51:01:01:104 (identity: 99.98%)

HLA-B\*51:01:01:114 (identity: 99.98%)

HLA-B\*51:01:01:70 (identity: 99.98%)

HLA-B\*51:136 (identity: 99.98%)

HLA-B\*51:03 (identity: 99.98%)

Locus: HLA-B

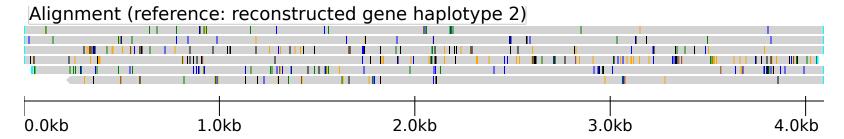
Resolution: 4th field

Full typing result:

HLA-B\*15:18:01:02

bam coverage

variants



HLA-B\*15:18:01:02 (identity: 100.00%)

Locus: HLA-C

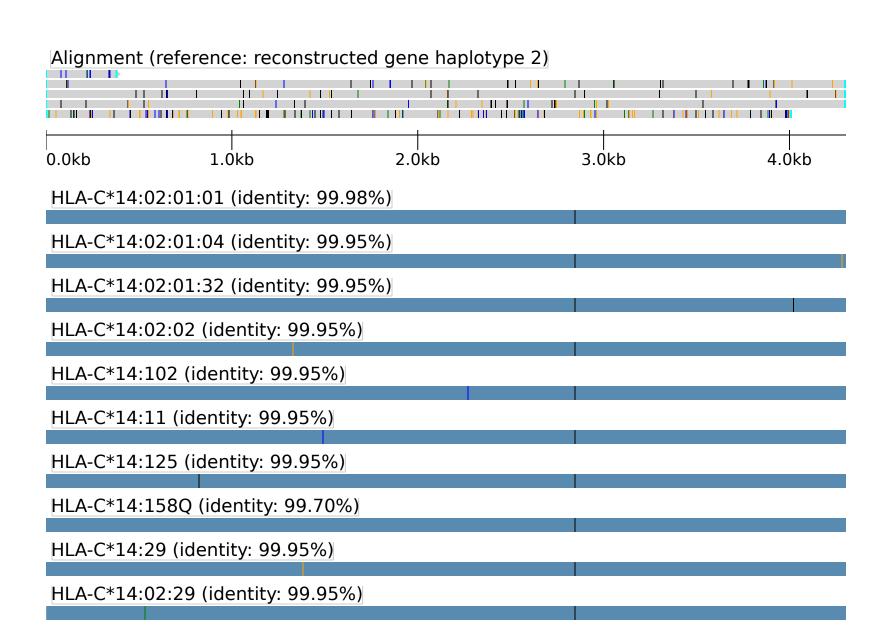
Resolution: 4th field

#### Full typing result:

HLA-C\*14:02:01:01 HLA-C\*14:02:01:04 | HLA-C\*14:02:01:32 HLA-C\*14:02:02 HLA-C\*14:102 HLA-C\*14:11 HLA-C\*14:02:29

#### bam coverage

variants



Locus: HLA-C

Resolution: 4th field

#### Full typing result:

HLA-C\*08:01:01

HLA-C\*08:01:01:03

HLA-C\*08:01:01:04

HLA-C\*08:01:01:12

HLA-C\*08:01:14

HLA-C\*08:01:01

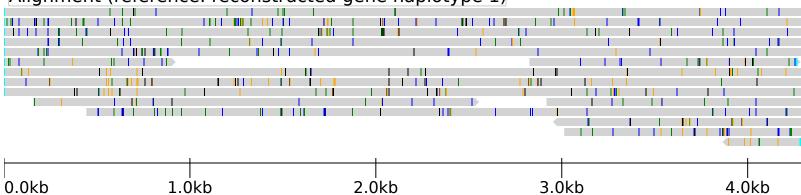
HLA-C\*08:01:36

HLA-C\*08:01:33

#### bam coverage

variants

Alignment (reference: reconstructed gene haplotype 1)



HLA-C\*08:01:01:01 (identity: 100.00%)

HLA-C\*08:01:01:03 (identity: 99.98%)

HLA-C\*08:01:01:04 (identity: 99.98%)

HLA-C\*08:01:01:12 (identity: 99.98%)

HLA-C\*08:01:14 (identity: 99.98%)

HLA-C\*08:03:01:01 (identity: 99.98%)

HLA-C\*08:01:01:02 (identity: 99.98%)

HLA-C\*08:01:36 (identity: 99.98%)

HLA-C\*08:236N (identity: 99.98%)

HLA-C\*08:01:33 (identity: 99.98%)

**Locus: HLA-DMA** 

Resolution: 4th field

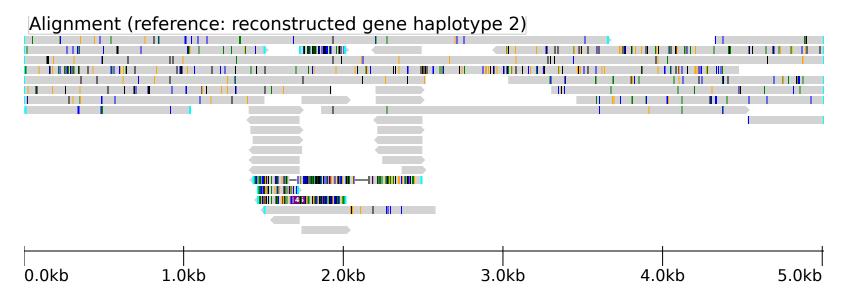
Full typing result:

HLA-DMA\*01:01:01:01



**1**5 10

variants



HLA-DMA\*01:01:01:01 (identity: 99.94%)

**Locus: HLA-DMA** 

Resolution: 4th field

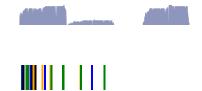
#### Full typing result:

HLA-DMA\*01:01:01 | HLA-DMA\*01:01:04 | HLA-DMA\*01:01:01:01 | HLA-DMA\*01:02:01:01 |

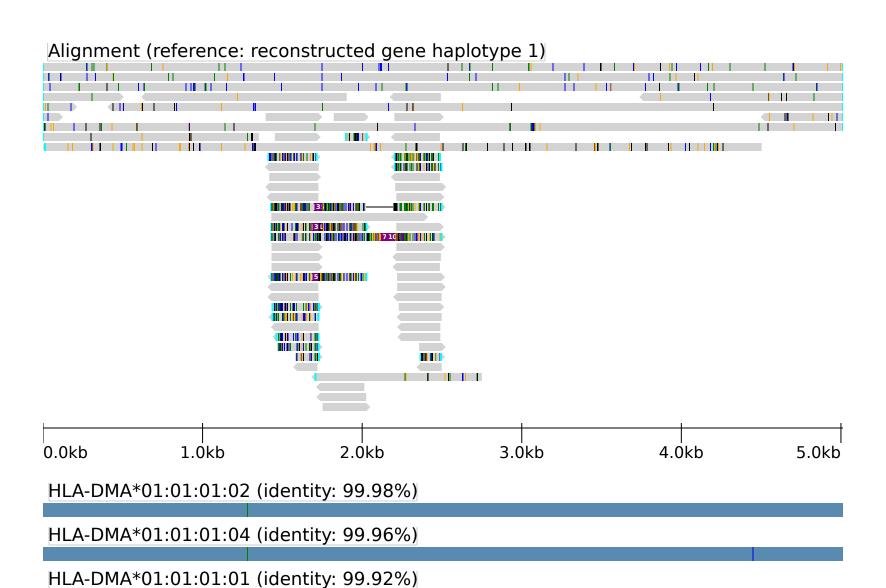
#### bam coverage

**□** 18

variants



HLA-DMA\*01:02:01:01 (identity: 99.94%)



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

1

Alignment (reference: reconstructed gene haplotype 1)

0.0kb 1.0kb 2.0kb 3.0kb 4.0kb 5.0kb 6.0kb

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-DMB** 

Resolution: 4th field

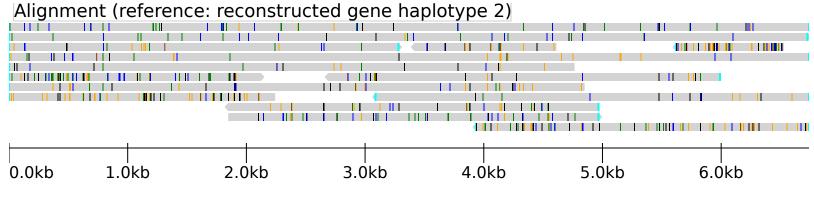
#### Full typing result:

HLA-DMB\*01:01:01:01 | HLA-DMB\*01:01:03 | HLA-DMB\*01:01:01:46

HLA-DMB\*01:02:01:04 | HLA-DMB\*01:02:01:05

#### bam coverage





HLA-DMB\*01:01:01:01 (identity: 99.97%)

HLA-DMB\*01:01:01:03 (identity: 99.96%)

HLA-DMB\*01:01:01:46 (identity: 99.96%)

HLA-DMB\*01:02:01:04 (identity: 99.96%)

HLA-DMB\*01:02:01:05 (identity: 99.94%)

**Locus: HLA-DOA** 

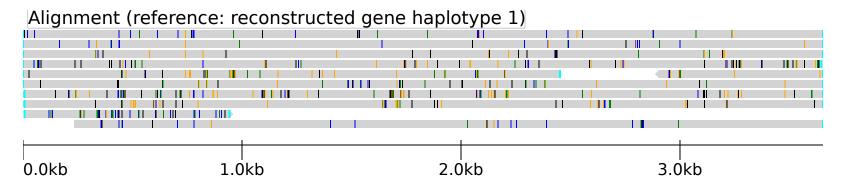
Resolution: 4th field

Full typing result:

HLA-DOA\*01:01:01:01

bam coverage





HLA-DOA\*01:01:01:01 (identity: 99.97%)

**Locus: HLA-DOA** 

Resolution: 4th field

#### Full typing result:

HLA-DOA\*01:01:02:45

bam coverage

variants

HLA-DOA\*01:01:02:45 (identity: 100.00%)

**Locus: HLA-DOB** 

Resolution: 4th field

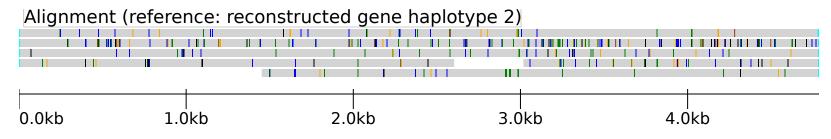
#### Full typing result:

HLA-DOB\*01:05 HLA-DOB\*01:01:04

bam coverage

Noviontel

variants



HLA-DOB\*01:05 (identity: 99.92%)

HLA-DOB\*01:01:01:04 (identity: 99.90%)

Locus: HLA-DOB

Resolution: 4th field

#### Full typing result:

HLA-DOB\*01:01:01 HLA-DOB\*01:16



**Locus: HLA-DPA1** 

Resolution: 4th field

Full typing result:

HLA-DPA1\*01:03:01:01

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

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

**Locus: HLA-DPA2** 

Resolution: 4th field

Full typing result:

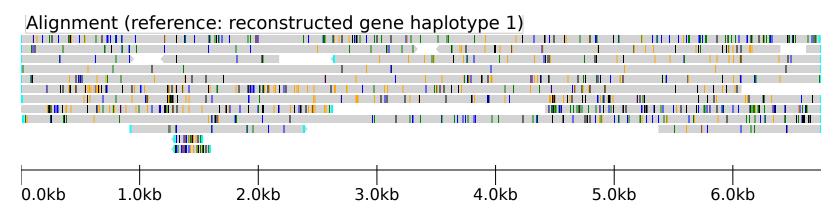
HLA-DPA2\*02:01:01:01

bam coverage

\_\_ 11 \_\_\_7

variants





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

Locus: HLA-DPB1

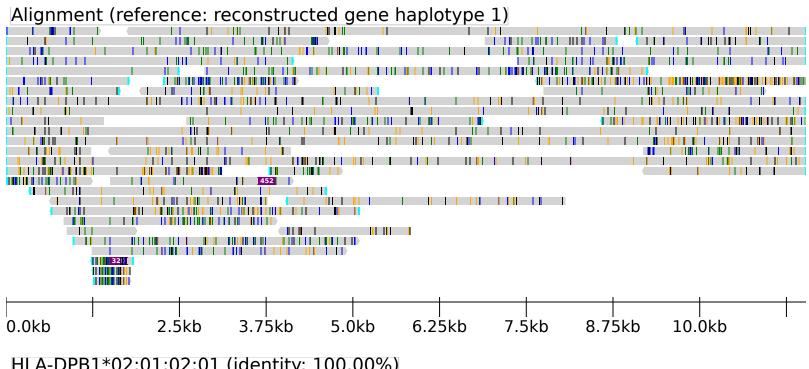
Resolution: 4th field

#### Full typing result:

HLA-DPB1*02:01:02:01	HLA-DPB1*02:01:02:05	HLA-DPB1*02:01:02:04
HLA-DPB1*02:01:02:06	HLA-DPB1*02:01:02:11	HLA-DPB1*02:01:02:12
HLA-DPB1*02:01:02:22	HLA-DPB1*02:01:02:34	HLA-DPB1*02:01:02:37
HLA-DPB1*02:01:02:43	HLA-DPB1*02:01:02:48	HLA-DPB1*02:01:02:51
HLA-DPB1*02:01:02:52	HLA-DPB1*02:01:02:53	HLA-DPB1*02:01:02:66

#### bam coverage

variants 



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

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

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

HLA-DPB1\*02:01:02:06 (identity: 99.99%)

HLA-DPB1\*02:01:02:11 (identity: 99.99%)

HLA-DPB1\*02:01:02:12 (identity: 99.99%)

HLA-DPB1\*02:01:02:22 (identity: 99.99%)

HLA-DPB1\*02:01:02:34 (identity: 99.99%)

HLA-DPB1\*02:01:02:37 (identity: 99.94%)

HLA-DPB1\*02:01:02:43 (identity: 99.99%)

## **Locus: HLA-DPB2** Resolution: 4th field Full typing result: HLA-DPB2\*01:01:02 bam coverage **■** 51 34 variants Alignment (reference: reconstructed gene haplotype 1) Alignment (reference: reconstructed gene naplotype 1) III 0.0kb 5.0kb 10.0kb 12.5kb 2.5kb 7.5kb 15.0kb HLA-DPB2\*01:01:02 (identity: 99.99%)

Sample: HG00418

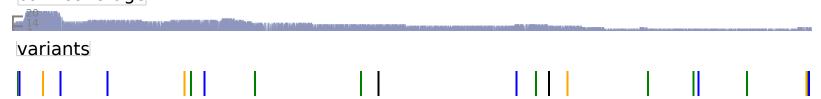
**Locus: HLA-DQA1** 

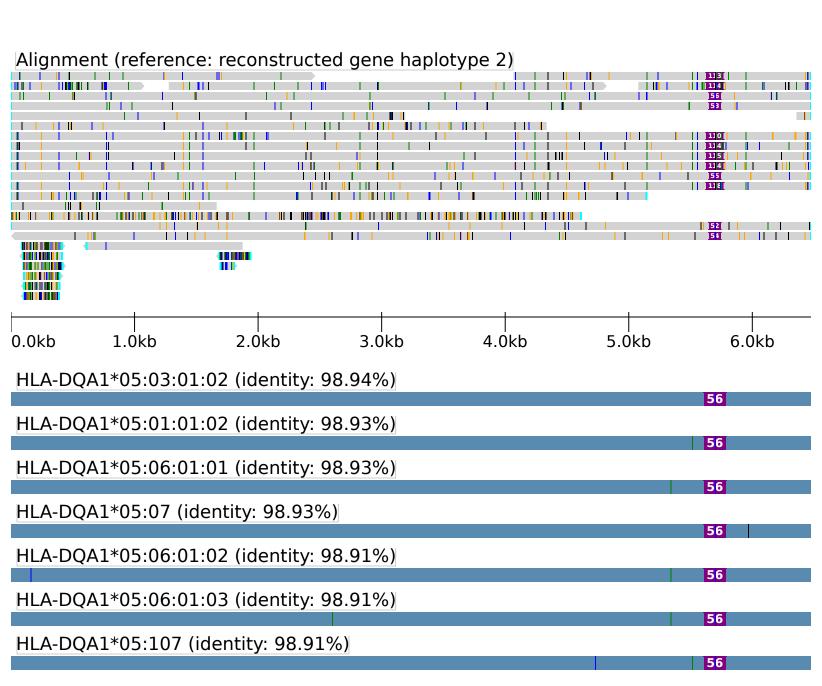
Resolution: 4th field

#### Full typing result:

HLA-DQA1\*05:03:01:02 HLA-DQA1\*05:01:01 HLA-DQA1\*05:06:01:01
HLA-DQA1\*05:07 HLA-DQA1\*05:06:01:02 HLA-DQA1\*05:06:01:03
HLA-DQA1\*05:107

bam coverage





Locus: HLA-DQA1 Resolution: 4th field Full typing result: HLA-DQA1\*05:05:01:09 | HLA-DQA1\*05:05:01:02 | HLA-DQA1\*05:05:01:01 HLA-DQA1\*05:11:01:01 | HLA-DQA1\*05:05:01:39 | HLA-DQA1\*05:05:01:10 HLA-DQA1\*05:09:01:04 bam coverage **■** 46 31 variants Alignment (reference: reconstructed gene haplotype 1) 41111111 3.0kb 0.0kb 1.0kb 2.0kb 4.0kb 5.0kb 6.0kb HLA-DQA1\*05:05:01:09 (identity: 99.98%) HLA-DQA1\*05:05:01:02 (identity: 99.86%) HLA-DQA1\*05:05:01:01 (identity: 99.92%) HLA-DQA1\*05:11:01:01 (identity: 99.97%) HLA-DQA1\*05:05:01:39 (identity: 99.97%) HLA-DQA1\*05:05:01:10 (identity: 99.91%) HLA-DQA1\*05:09:01:04 (identity: 99.95%)

Sample: HG00418

### Resolution: 4th field Full typing result: HLA-DQA2\*01:01:02:01 bam coverage F 68 variants Alignment (reference: reconstructed gene haplotype 1) 3 0.0kb 30.0kb 10.0kb 20.0kb HLA-DQA2\*01:01:02:01 (identity: 99.98%)

Sample: HG00418

**Locus: HLA-DQA2** 

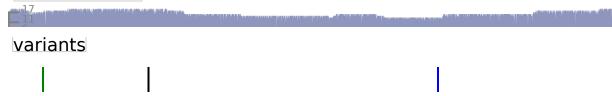
**Locus: HLA-DQB1** 

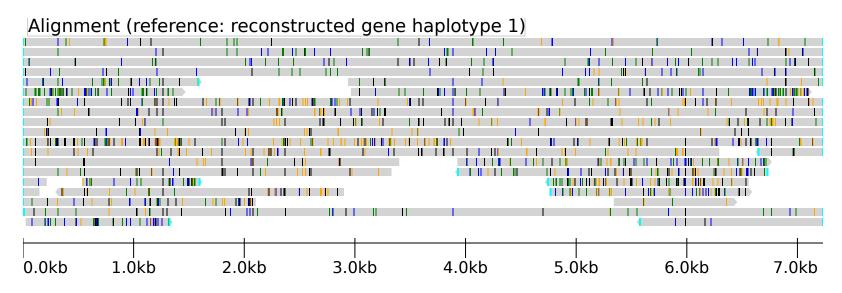
Resolution: 4th field

Full typing result:

HLA-DQB1\*03:01:01:10

bam coverage





HLA-DQB1\*03:01:01:10 (identity: 100.00%)

**Locus: HLA-DQB1** 

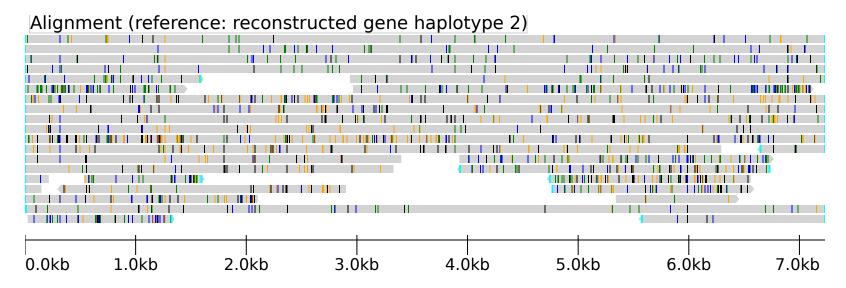
Resolution: 4th field

Full typing result:

HLA-DQB1\*03:01:01:03



variants



HLA-DQB1\*03:01:01:03 (identity: 100.00%)

**Locus: HLA-DQB2** 

Resolution: 4th field

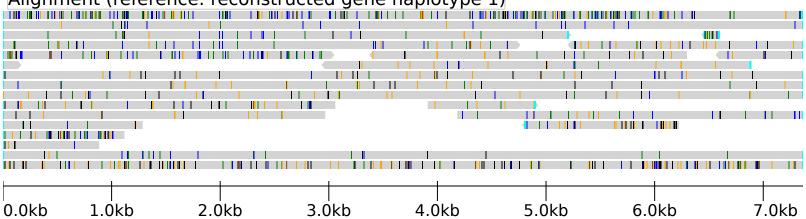
Full typing result:

HLA-DQB2\*01:01:01:01

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 1)



HLA-DQB2\*01:01:01:01 (identity: 100.00%)

# Sample: HG00418 Locus: HLA-DRA Resolution: 4th field

Full typing result:

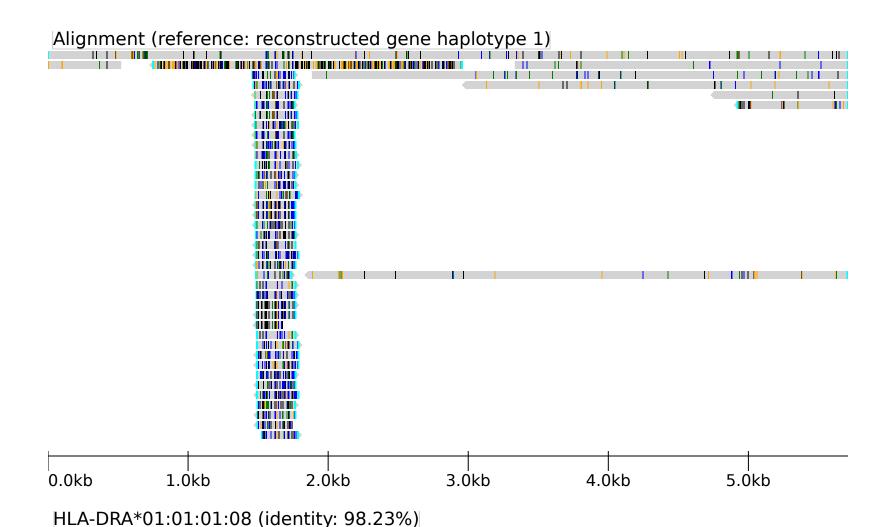
HLA-DRA\*01:01:01:08

bam coverage

\$\sum\_{23}^{34}\$

variants

| | | |



**Locus: HLA-DRA** 

Resolution: 4th field

Full typing result:

HLA-DRA\*01:02:02:08

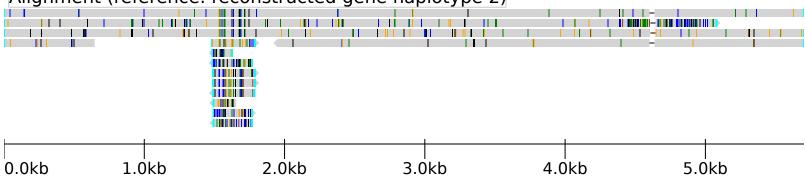
#### bam coverage

F 7

variants







HLA-DRA\*01:02:02:08 (identity: 99.12%)

Sample: HG00418 Locus: HLA-DRB1 Resolution: 4th field Full typing result: HLA-DRB1\*13:07:01 | HLA-DRB1\*11:01:02:01 | HLA-DRB1\*14:12:01 HLA-DRB1\*11:01:01:01 | HLA-DRB1\*14:03:01 | HLA-DRB1\*11:01:01:03 HLA-DRB1\*11:04:01:01 | HLA-DRB1\*11:01:01:04 | HLA-DRB1\*14:02:01:02 bam coverage variants Alignment (reference: reconstructed gene haplotype 2) 3; ( ) 32 320 31 33D 14: 18 11 THE STATE OF THE S 0.0kb 2.5kb 5.0kb 6.25kb 11.25kb 3.75kb 7.5kb 8.75kb 13.75kb HLA-DRB1\*13:07:01 (identity: 97.03%) HLA-DRB1\*11:01:02:01 (identity: 96.96%) HLA-DRB1\*14:12:01 (identity: 96.98%) HLA-DRB1\*11:01:01:01 (identity: 97.03%) HLA-DRB1\*14:03:01 (identity: 96.97%) HLA-DRB1\*11:01:01:03 (identity: 97.01%) HLA-DRB1\*11:04:01:01 (identity: 97.03%) HLA-DRB1\*11:01:01:04 (identity: 96.97%) HLA-DRB1\*14:02:01:02 (identity: 96.93%)

Resolution: 4th field Full typing result: HLA-DRB1\*11:01:01:03 HLA-DRB1\*11:01:01:12N HLA-DRB1\*11:01:01:01 | HLA-DRB1\*11:01:01:04 | | HLA-DRB1\*11:04:01:01 | | HLA-DRB1\*11:01:02:01 HLA-DRB1\*13:07:01 bam coverage П variants Alignment (reference: reconstructed gene haplotype 1) Alignment (reference: reconstructed gene haplotype 1) 100 331 32 \_\_\_\_\_ 301 310 21 19 / 20 9 5.0kb 0.0kb 2.5kb 3.75kb 6.25kb 7.5kb 8.75kb 11.25kb 13.75kb HLA-DRB1\*11:01:01:03 (identity: 99.94%) HLA-DRB1\*11:01:01:12N (identity: 99.93%) HLA-DRB1\*11:01:01:01 (identity: 99.94%) HLA-DRB1\*11:01:01:04 (identity: 99.90%) HLA-DRB1\*11:04:01:01 (identity: 99.94%) HLA-DRB1\*11:01:02:01 (identity: 99.86%) HLA-DRB1\*13:07:01 (identity: 99.91%)

Sample: HG00418

Locus: HLA-DRB1

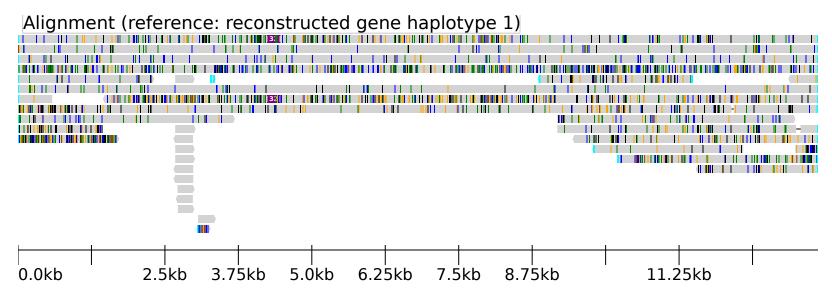
Locus: HLA-DRB3

Resolution: 4th field

Full typing result:

HLA-DRB3\*02:02:01:02



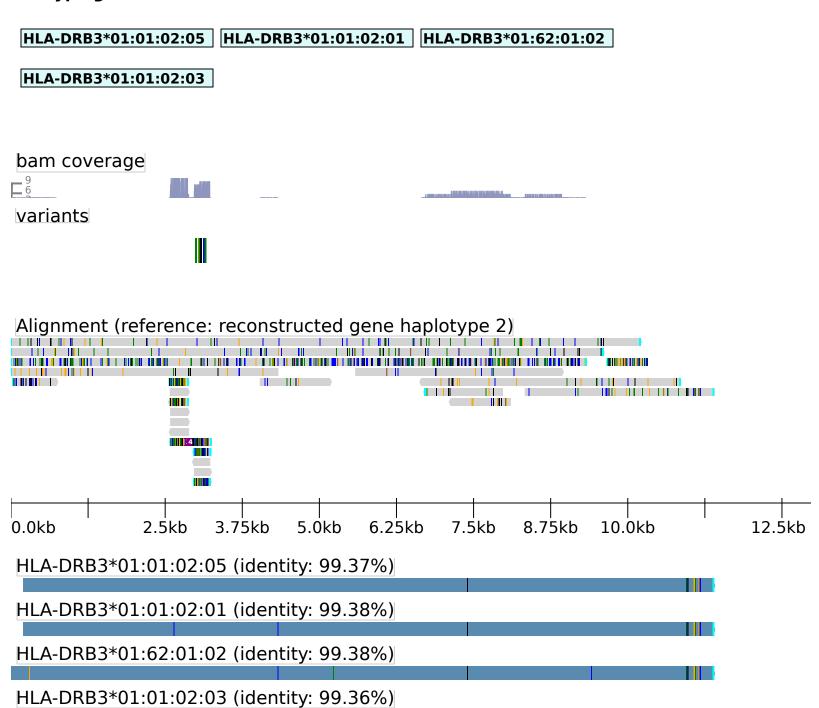


HLA-DRB3\*02:02:01:02 (identity: 100.00%)

Locus: HLA-DRB3

Resolution: 4th field

#### Full typing result:



**Locus: HLA-DRB4** 

Resolution: 4th field

#### Full typing result:

HLA-DRB4\*01:01:01:01 | HLA-DRB4\*02:01N | HLA-DRB4\*01:01:12

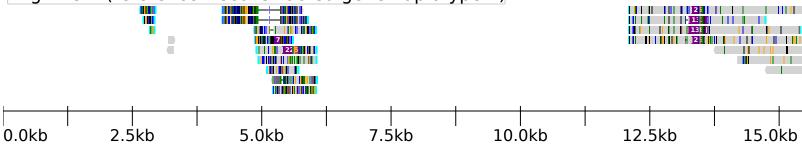
HLA-DRB4\*01:01:01:04

#### bam coverage

variants



Alignment (reference: reconstructed gene haplotype 1)



HLA-DRB4\*01:01:01:01 (identity: 94.60%)

HLA-DRB4\*02:01N (identity: 94.59%)

HLA-DRB4\*01:01:12 (identity: 94.59%)

HLA-DRB4\*01:01:01:04 (identity: 94.31%)





**Locus: HLA-DRB4** 

Resolution: 4th field

#### Full typing result:

HLA-DRB4\*01:01:01

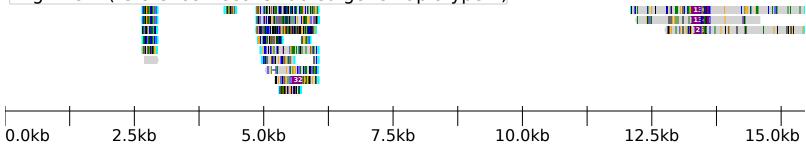
HLA-DRB4\*01:01:03

HLA-DRB4\*01:01:04

#### bam coverage

variants

Alignment (reference: reconstructed gene haplotype 2)



HLA-DRB4\*01:01:01:01 (identity: 94.60%)

HLA-DRB4\*01:01:01:03 (identity: 94.29%)

HLA-DRB4\*01:01:01:04 (identity: 94.31%)

HLA-DRB4\*01:01:12 (identity: 94.59%)

**Locus: HLA-DRB5** 

Resolution: 4th field

#### Full typing result:

HLA-DRB5\*01:01:01:04

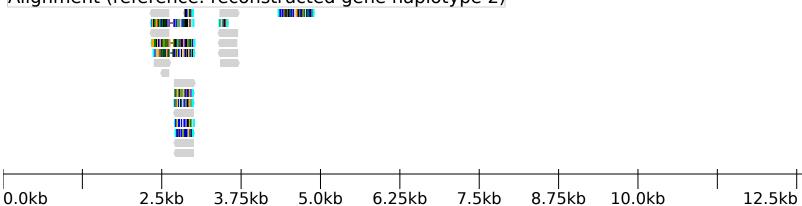
#### bam coverage

F 7 7

variants



Alignment (reference: reconstructed gene haplotype 2)



HLA-DRB5\*01:01:01:04 (identity: 70.76%)

Sample: HG00418 **Locus: HLA-DRB5** Resolution: 4th field Full typing result: HLA-DRB5\*01:02:01 bam coverage **□** 41 27 variants Alignment (reference: reconstructed gene haplotype 1) 3 2 0.0kb 2.5kb 3.75kb 5.0kb 6.25kb 7.5kb 8.75kb 10.0kb 12.5kb HLA-DRB5\*01:02:01 (identity: 73.49%) 

Locus: HLA-E

Resolution: 4th field

Full typing result:

HLA-E\*01:01:02

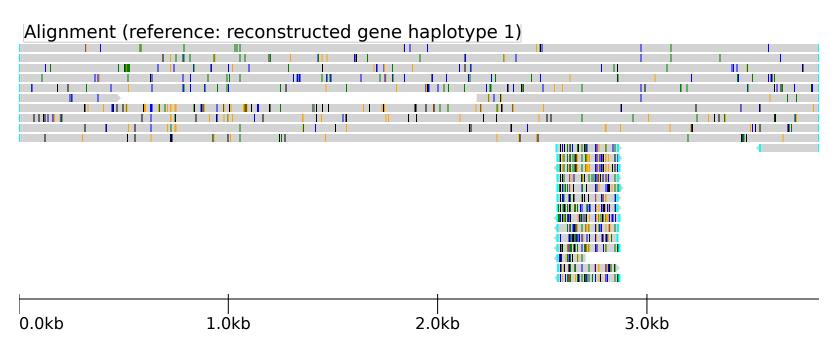
bam coverage

**□** <sup>21</sup> <sup>14</sup>

variants







HLA-E\*01:01:02 (identity: 100.00%)

**Locus: HLA-F** 

Resolution: 4th field

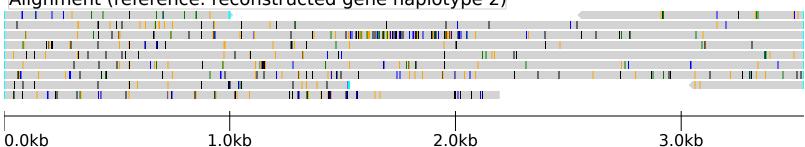
Full typing result:

HLA-F\*01:10

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 2)



HLA-F\*01:10 (identity: 99.92%)

Locus: HLA-F

Resolution: 4th field

#### Full typing result:

HLA-F\*01:01:09 HLA-F\*01:01:01:10 HLA-F\*01:01:01:11

HLA-F\*01:01:01:12 HLA-F\*01:01:01:27 HLA-F\*01:01:01:29

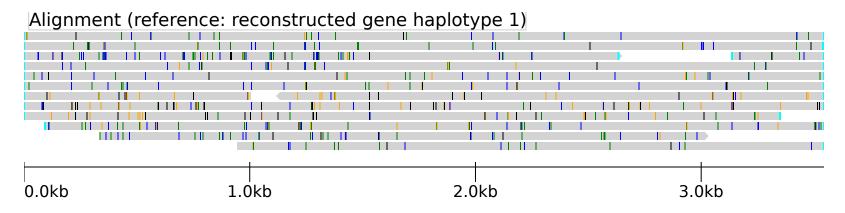
HLA-F\*01:01:01:42 HLA-F\*01:01:01:43 HLA-F\*01:01:06

HLA-F\*01:01:07 HLA-F\*01:01:08 HLA-F\*01:01:11

HLA-F\*01:02:01:02 HLA-F\*01:10 HLA-F\*01:12

#### bam coverage

variants



HLA-F\*01:01:01:09 (identity: 99.94%)

HLA-F\*01:01:01:10 (identity: 99.92%)

HLA-F\*01:01:01:11 (identity: 99.92%)

HLA-F\*01:01:01:12 (identity: 99.92%)

HLA-F\*01:01:01:27 (identity: 99.92%)

HLA-F\*01:01:01:29 (identity: 99.92%)

HLA-F\*01:01:01:42 (identity: 99.92%)

HLA-F\*01:01:01:43 (identity: 99.92%)

HLA-F\*01:01:06 (identity: 99.92%)

HLA-F\*01:01:07 (identity: 99.92%)

Locus: HLA-G

Resolution: 4th field

#### Full typing result:

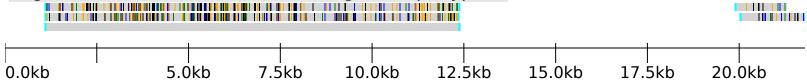
HLA-G\*01:04:01:01 | HLA-G\*01:21N | HLA-G\*01:04:01:08

HLA-G\*01:07 HLA-G\*01:04:01:05 HLA-G\*01:43

#### bam coverage

variants





HLA-G\*01:04:01:01 (identity: 100.00%)

HLA-G\*01:21N (identity: 99.95%)

HLA-G\*01:04:01:08 (identity: 100.00%)

HLA-G\*01:07 (identity: 100.00%)

HLA-G\*01:04:01:05 (identity: 99.95%)

HLA-G\*01:43 (identity: 100.00%)

**Locus: HLA-G** 

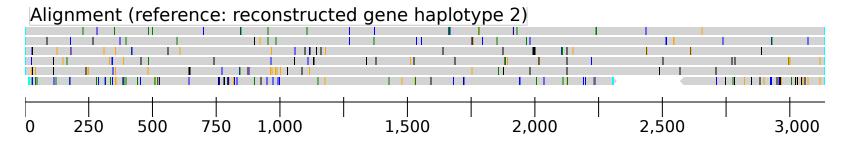
Resolution: 4th field

Full typing result:

HLA-G\*01:04:04:01

### bam coverage

variants



HLA-G\*01:04:04:01 (identity: 100.00%)

Locus: HLA-J

Resolution: 4th field

Full typing result:

HLA-J\*01:01:02

bam coverage

variants

0.0kb

Alignment (reference: reconstructed gene haplotype 1)

2.0kb

3.0kb

HLA-J\*01:01:02 (identity: 100.00%)

1.0kb

**Locus: HLA-L** 

Resolution: 4th field

Full typing result:

HLA-L\*01:03

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 1)

0.0kb 1.0kb 2.0kb 3.0kb

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

Locus: HLA-N

Resolution: 4th field

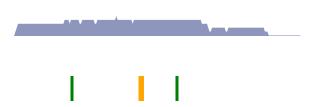
Full typing result:

HLA-N\*01:01:01:01

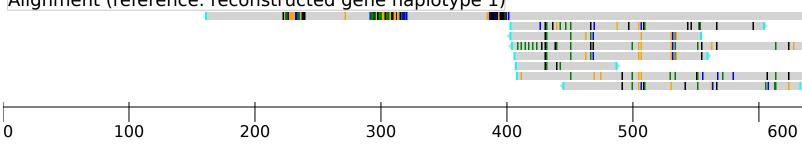
bam coverage

F 5

variants



Alignment (reference: reconstructed gene haplotype 1)



HLA-N\*01:01:01 (identity: 85.23%)

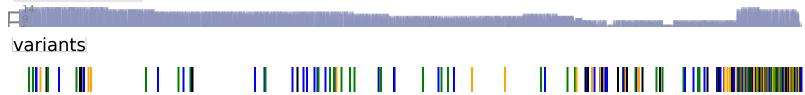
Locus: HLA-P

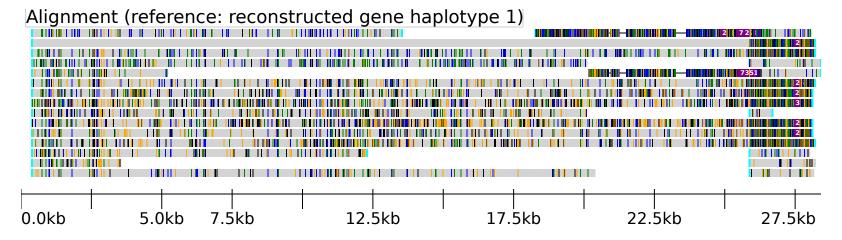
Resolution: 4th field

Full typing result:

HLA-P\*02:01:01:02

bam coverage





HLA-P\*02:01:01:02 (identity: 99.96%)

**Locus: HLA-S** 

Resolution: 4th field

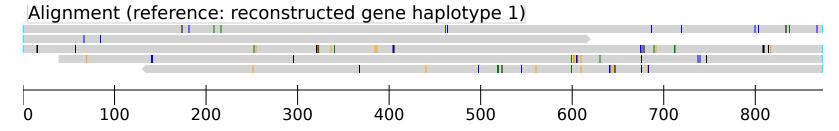
### Full typing result:

HLA-S\*01:02:01:03

### bam coverage

**3** 

variants



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

**Locus: HLA-T** 

Resolution: 4th field

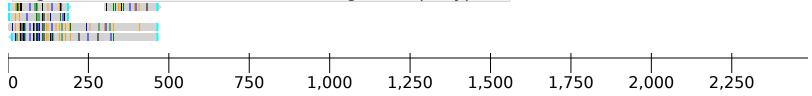
### Full typing result:

HLA-T\*03:01:01:01

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 1)



HLA-T\*03:01:01:01 (identity: 96.77%)

**Locus: HLA-T** 

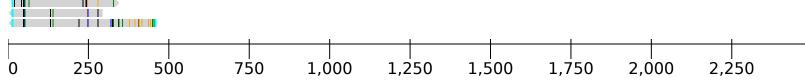
Resolution: 4th field

#### Full typing result:

HLA-T\*03:01:01:02

bam coverage variants

Alignment (reference: reconstructed gene haplotype 2)



HLA-T\*03:01:01:02 (identity: 94.37%)

**Locus: HLA-U** 

Resolution: 4th field

Full typing result:

HLA-U\*01:03

bam coverage

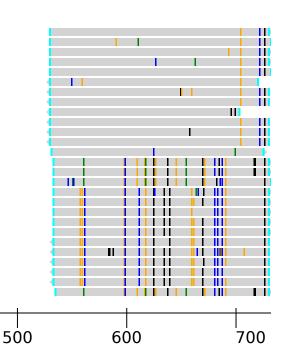
**□** 24 16

0

variants



Alignment (reference: reconstructed gene haplotype 1)



HLA-U\*01:03 (identity: 92.08%)

200

300

400

100

**Locus: HLA-V** 

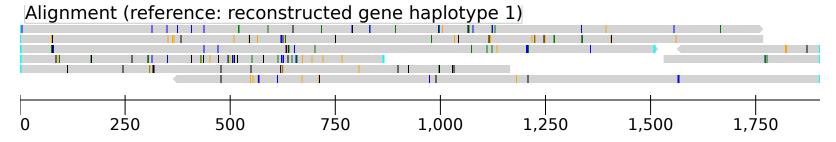
Resolution: 4th field

Full typing result:

HLA-V\*01:01:01:04

bam coverage

variants



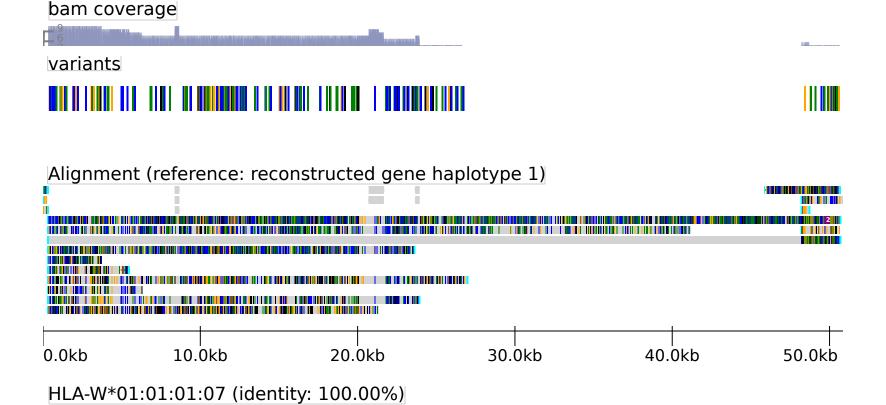
HLA-V\*01:01:01:04 (identity: 100.00%)

**Locus: HLA-W** 

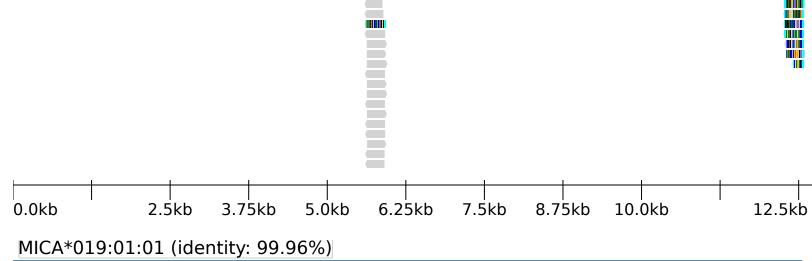
Resolution: 4th field

#### Full typing result:

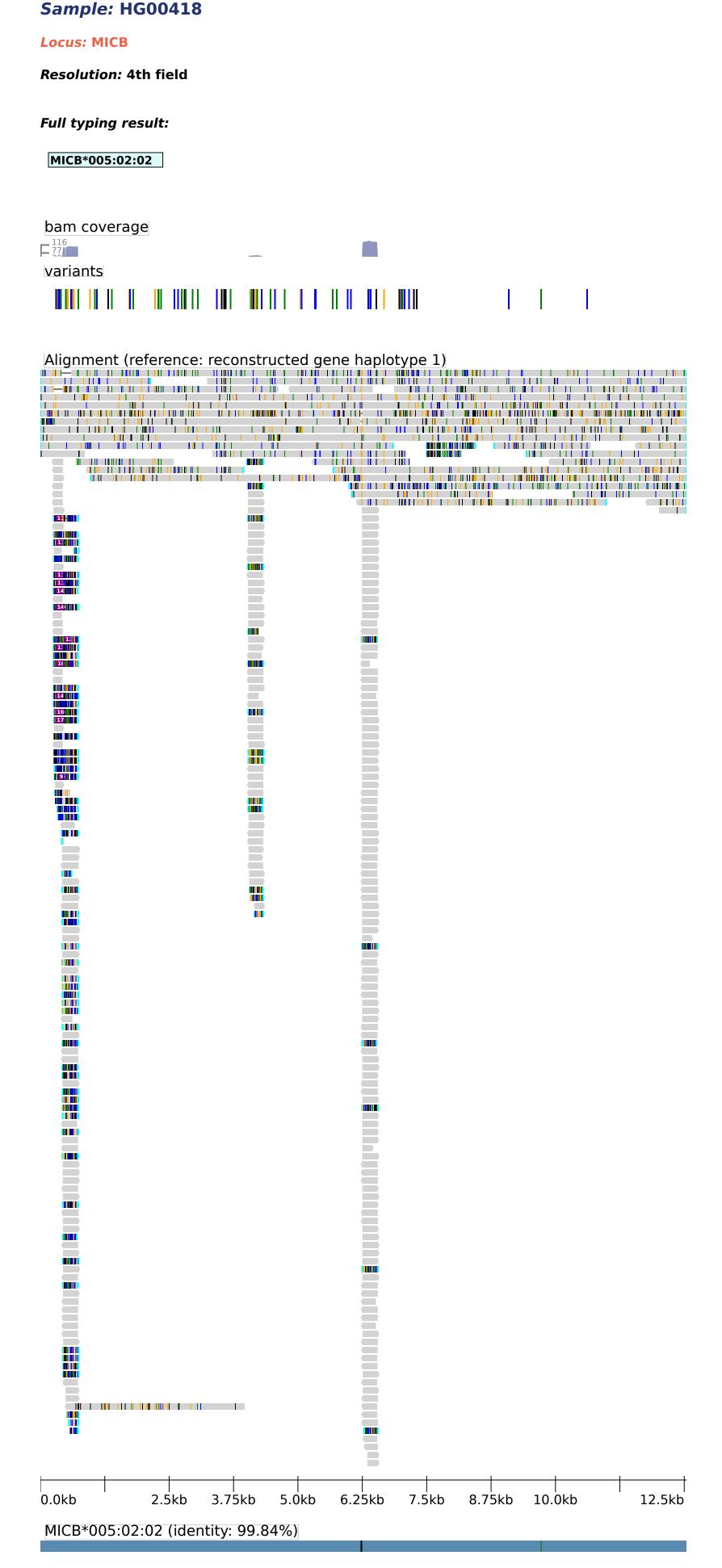
HLA-W\*01:01:01:07



### Sample: HG00418 Locus: MICA Resolution: 4th field Full typing result: MICA\*019:01:01 bam coverage **■** 39 26 variants Alignment (reference: reconstructed gene haplotype 1)



Sample: HG00418 Locus: MICA Resolution: 4th field Full typing result: MICA\*009:01:10 bam coverage **□** 46 30 variants Alignment (reference: reconstructed gene haplotype 2) I П 6 ı 1( 11 / 4 9 4 50.0kb 0.0kb 10.0kb 20.0kb 30.0kb 40.0kb MICA\*009:01:10 (identity: 97.57%)



Locus: TAP1

Resolution: 4th field

Full typing result:

TAP1\*01:01:01:05

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

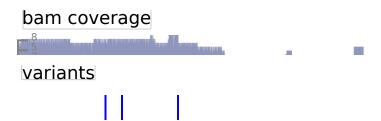
TAP1\*01:01:01:05 (identity: 99.99%)

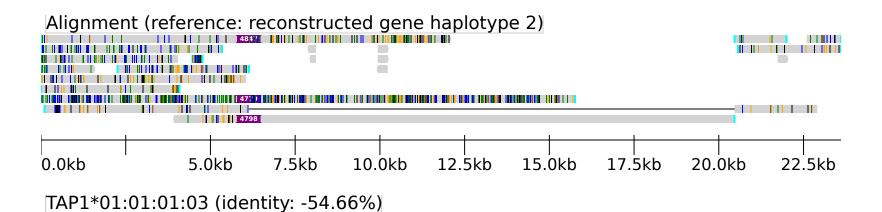
Locus: TAP1

Resolution: 4th field

Full typing result:

TAP1\*01:01:01:03





**Locus: TAP2** 

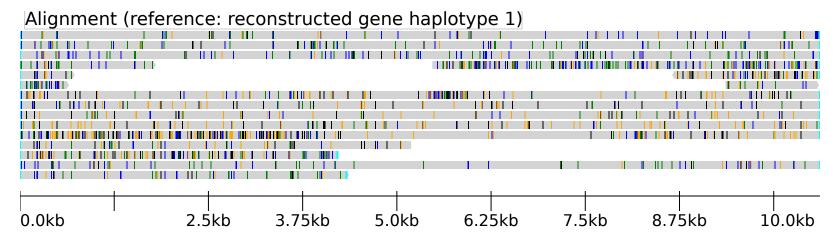
Resolution: 4th field

#### Full typing result:

TAP2\*02:01:02:02 TAP2\*02:01:02:03

#### bam coverage

variants



TAP2\*02:01:02:02 (identity: 99.84%)

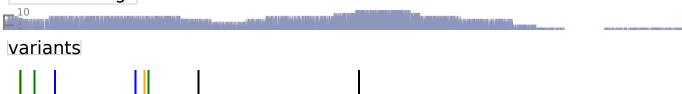
TAP2\*02:01:02:03 (identity: 99.83%)

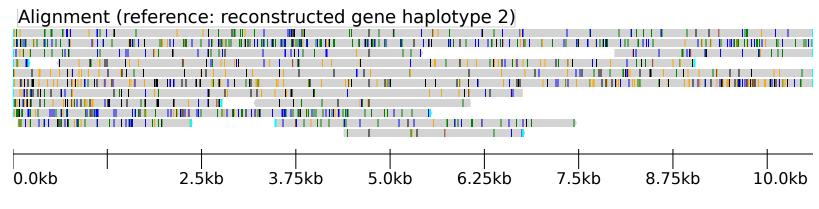
**Locus: TAP2** 

Resolution: 4th field

### Full typing result:

#### bam coverage





TAP2\*01:01:07:05 (identity: 99.79%)

TAP2\*01:01:02:01 (identity: 99.77%)

TAP2\*01:01:03:01 (identity: 99.76%)

TAP2\*01:01:03:02 (identity: 99.75%)