Locus: HLA-A

Resolution: 4th field

Full typing result:

HLA-A*02:01:01:132

bam coverage

3

variants

HLA-A*02:01:01:132 (identity: 100.00%)

Locus: HLA-A

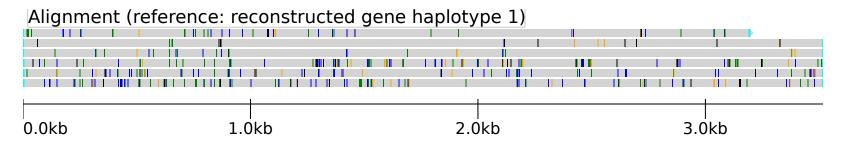
Resolution: 4th field

Full typing result:

HLA-A*02:151

bam coverage





HLA-A*02:151 (identity: 99.94%)

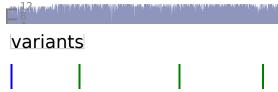
Locus: HLA-B

Resolution: 4th field

Full typing result:

HLA-B*15:01:01:01

bam coverage



Alignment (reference: reconstructed gene haplotype 1)

0.0kb 1.0kb 2.0kb 3.0kb 4.0kb

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

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-C

Resolution: 4th field

Full typing result:

HLA-C*07:02:01:03 HLA-C*07:02:01:01 HLA-C*07:02:01:189

HLA-C*07:02:01:19 HLA-C*07:02:01:191 HLA-C*07:02:01:192

HLA-C*07:02:01:195 HLA-C*07:02:01:196 HLA-C*07:02:01:197

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 2)

0.0kb 1.0kb 2.0kb 3.0kb 4.0kb

HLA-C*07:02:01:03 (identity: 100.00%)

HLA-C*07:02:01:01 (identity: 99.98%)

HLA-C*07:02:01:189 (identity: 99.98%)

HLA-C*07:02:01:19 (identity: 99.98%)

HLA-C*07:02:01:191 (identity: 99.98%)

HLA-C*07:02:01:192 (identity: 99.98%)

HLA-C*07:02:01:195 (identity: 99.98%)

HLA-C*07:02:01:196 (identity: 99.98%)

HLA-C*07:02:01:197 (identity: 99.98%)

HLA-C*07:02:16 (identity: 99.98%)

Locus: HLA-C

Resolution: 4th field

Full typing result:

HLA-C*03:03:01:01 HLA-C*03:03:01:34 HLA-C*03:03:01:69

HLA-C*03:03:01:70 HLA-C*03:03:22 HLA-C*03:126

HLA-C*03:43:01 HLA-C*03:479 HLA-C*03:507

HLA-C*03:187

bam coverage

variants

0.0kb

Alignment (reference: reconstructed gene haplotype 1)

2.0kb

3.0kb

4.0kb

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

1.0kb

HLA-C*03:03:01:34 (identity: 99.98%)

HLA-C*03:03:01:69 (identity: 99.98%)

HLA-C*03:03:01:70 (identity: 99.98%)

HLA-C*03:03:22 (identity: 99.98%)

HLA-C*03:126 (identity: 99.98%)

HLA-C*03:43:01 (identity: 99.98%)

HLA-C*03:479 (identity: 99.98%)

HLA-C*03:507 (identity: 99.98%)

HLA-C*03:187 (identity: 99.98%)

Sample: HG01256 **Locus: HLA-DMA** Resolution: 4th field Full typing result: HLA-DMA*01:01:01:02 bam coverage **7**8 52 52 variants Alignment (reference: reconstructed gene haplotype 1) 59 4 THE RESERVE TO THE 5 12 400000 0.0kb 2.0kb 3.0kb 5.0kb 1.0kb 4.0kb

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

Locus: HLA-DMB

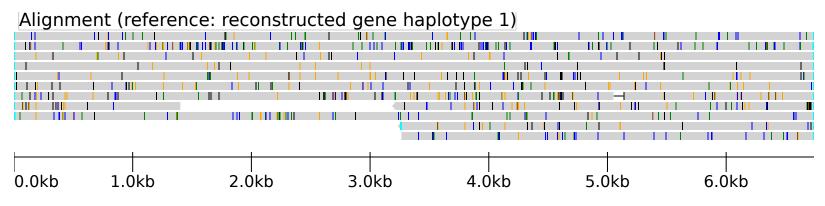
Resolution: 4th field

Full typing result:

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

bam coverage

variants



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

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

HLA-DMB*01:01:01:46 (identity: 99.97%)

Locus: HLA-DMB

Resolution: 4th field

Full typing result:

HLA-DMB*01:01:01:03

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 2)

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

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

Locus: HLA-DOA

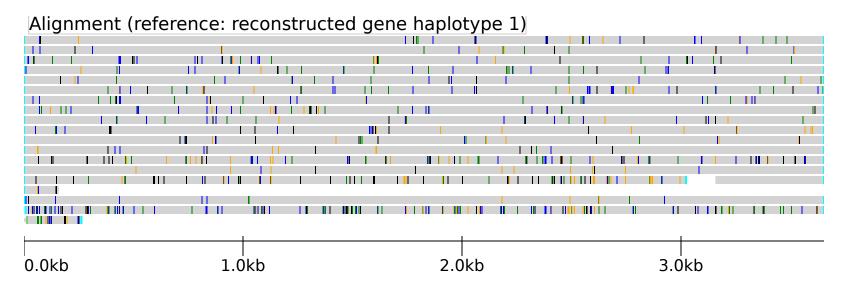
Resolution: 4th field

Full typing result:

HLA-DOA*01:01:05

bam coverage

variants



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

Locus: HLA-DOA

Resolution: 4th field

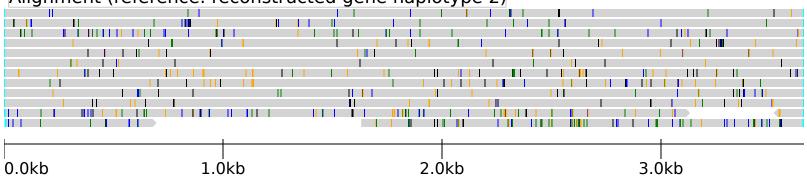
Full typing result:

HLA-DOA*01:01:04:01

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 2)



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

Locus: HLA-DOB

Resolution: 4th field

Full typing result:

HLA-DOB*01:01:01:04

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 2)

0.0kb 2.0kb 3.0kb 1.0kb 4.0kb

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

Locus: HLA-DOB

Resolution: 4th field

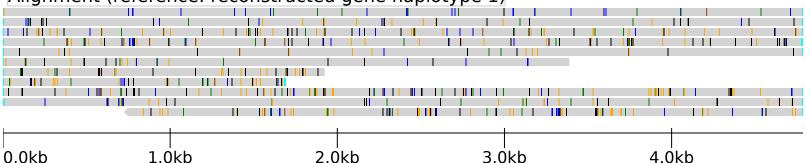
Full typing result:

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

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 1)



HLA-DOB*01:05 (identity: 99.94%)

HLA-DOB*01:01:04 (identity: 99.92%)

Locus: HLA-DPA1

Resolution: 4th field

Full typing result:

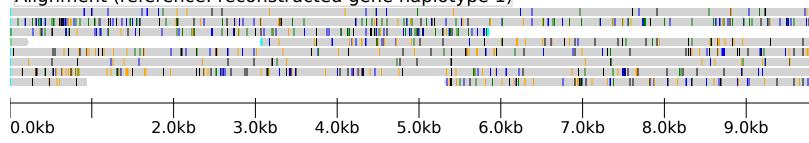
HLA-DPA1*02:01:08:03 | HLA-DPA1*02:01:01:02 | HLA-DPA1*02:01:02:03

HLA-DPA1*02:26:01:01 HLA-DPA1*02:84

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 1)



HLA-DPA1*02:01:08:03 (identity: 99.99%)

HLA-DPA1*02:01:01:02 (identity: 99.98%)

HLA-DPA1*02:01:02:03 (identity: 99.97%)

HLA-DPA1*02:26:01:01 (identity: 99.97%)

HLA-DPA1*02:84 (identity: 99.96%)

Locus: HLA-DPA1

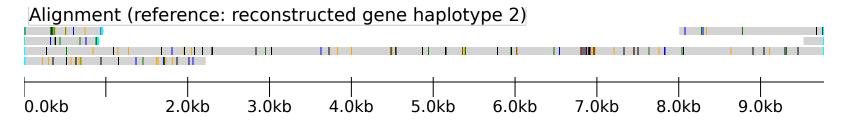
Resolution: 4th field

Full typing result:

HLA-DPA1*01:03:01:02

bam coverage

variants



HLA-DPA1*01:03:01:02 (identity: 100.00%)

Locus: HLA-DPA2

Resolution: 4th field

Full typing result:

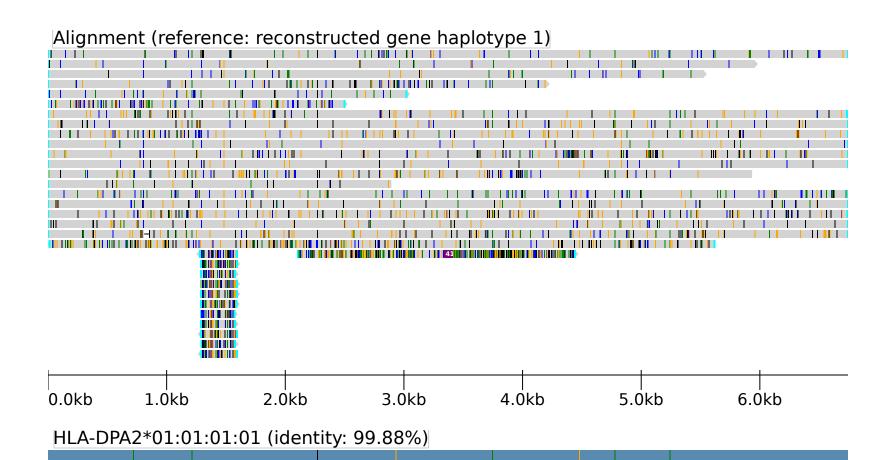
HLA-DPA2*01:01:01:01

bam coverage

__ 27

variants





Locus: HLA-DPB1

Resolution: 4th field

Full typing result:

HLA-DPB1*11:01:01:01 | HLA-DPB1*11:01:02 | HLA-DPB1*11:01:03

HLA-DPB1*11:01:02 | HLA-DPB1*11:01:03 | HLA-DPB1*1234:01

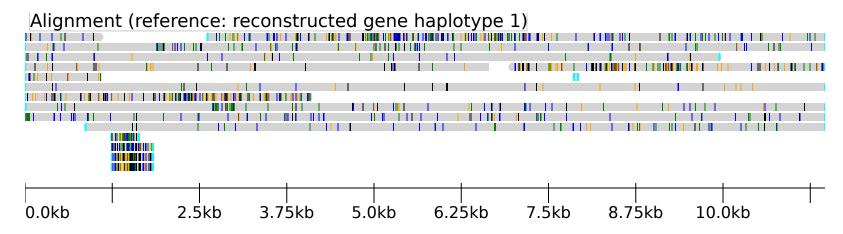
HLA-DPB1*672:01

bam coverage

____11

variants





HLA-DPB1*11:01:01:01 (identity: 100.00%)

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

HLA-DPB1*11:01:01:03 (identity: 99.99%)

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

HLA-DPB1*11:01:03 (identity: 99.99%)

HLA-DPB1*1234:01 (identity: 99.99%)

HLA-DPB1*1364:01N (identity: 99.99%)

HLA-DPB1*1545:01 (identity: 99.99%)

HLA-DPB1*649:01 (identity: 99.99%)

HLA-DPB1*672:01 (identity: 99.99%)

Locus: HLA-DPB1

Resolution: 4th field

Full typing result:

HLA-DPB1*04:01:01 HLA-DPB1*04:01:01:35 HLA-DPB1*04:01:01:06

HLA-DPB1*1423:01N HLA-DPB1*04:01:01:02 HLA-DPB1*04:01:01:04

HLA-DPB1*04:01:01:07 HLA-DPB1*04:01:01:08 HLA-DPB1*04:01:01:10

HLA-DPB1*04:01:01:101 HLA-DPB1*04:01:01:104 HLA-DPB1*04:01:01:108

| HLA-DPB1*04:01:01:113 | | HLA-DPB1*04:01:01:114 | | HLA-DPB1*04:01:01:115 |

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 2) 0.0kb 2.5kb 3.75kb 5.0kb 6.25kb 7.5kb 8.75kb 10.0kb

HLA-DPB1*04:01:01:01 (identity: 99.99%)

HLA-DPB1*04:01:01:35 (identity: 99.92%)

HLA-DPB1*04:01:01:06 (identity: 99.96%)

HLA-DPB1*1423:01N (identity: 99.96%)

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

HLA-DPB1*04:01:01:04 (identity: 99.96%)

HLA-DPB1*04:01:01:07 (identity: 99.98%)

HLA-DPB1*04:01:01:08 (identity: 99.98%)

HLA-DPB1*04:01:01:10 (identity: 99.98%)

HLA-DPB1*04:01:01:101 (identity: 99.98%)

Sample: HG01256 Locus: HLA-DPB2 Resolution: 4th field Full typing result: HLA-DPB2*03:01:01:01 bam coverage **□** 47 32 n a variants Alignment (reference: reconstructed gene haplotype 2 Alignment (reference: reconstructed gene haplotype 2) П -Ш 5 Ш

20.0kb

30.0kb

HLA-DPB2*03:01:01:01 (identity: 9.06%)

10.0kb

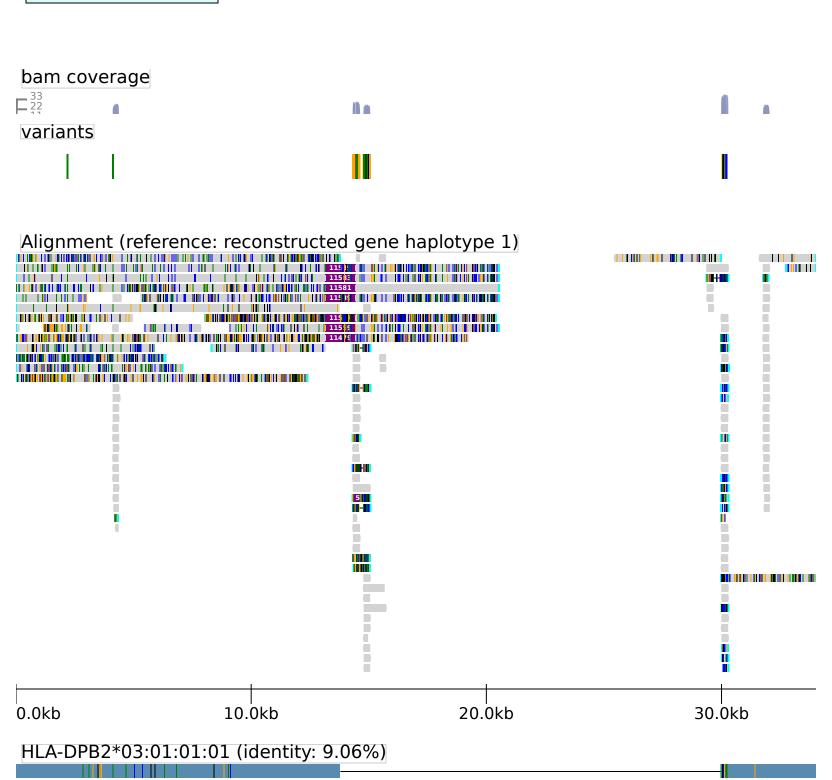
0.0kb

Sample: HG01256 Locus: HLA-DPB2

Resolution: 4th field

Full typing result:

HLA-DPB2*03:01:01:01



Locus: HLA-DQA1

Resolution: 4th field

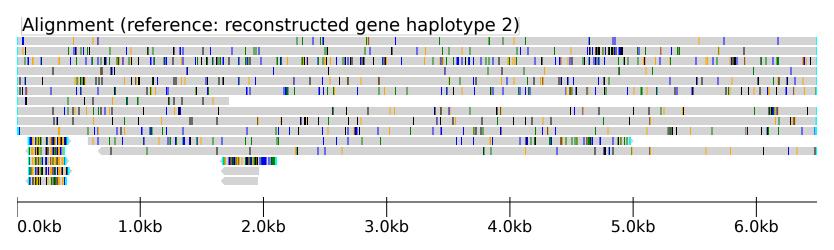
Full typing result:

HLA-DQA1*01:03:01:02

bam coverage







HLA-DQA1*01:03:01:02 (identity: 100.00%)

Locus: HLA-DQA1

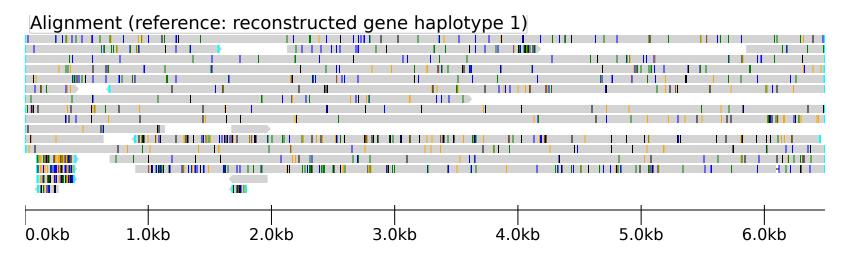
Resolution: 4th field

Full typing result:

HLA-DQA1*01:01:01:01

bam coverage

variants



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

Locus: HLA-DQA2

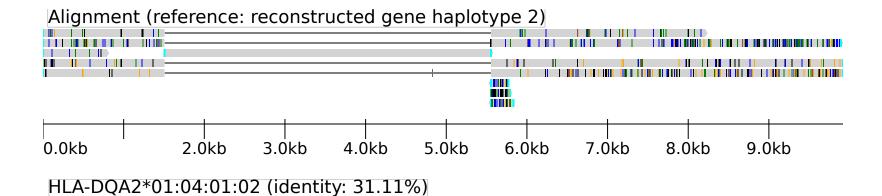
Resolution: 4th field

Full typing result:

HLA-DQA2*01:04:01:02

bam coverage

variants



Locus: HLA-DQA2

Resolution: 4th field

Full typing result:

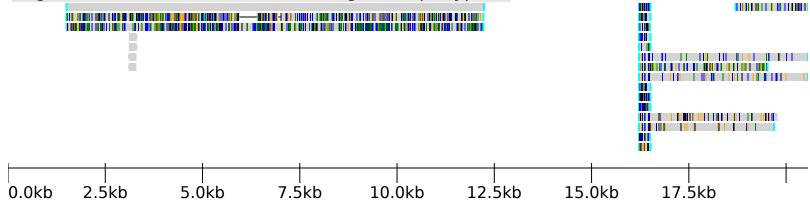
HLA-DQA2*01:01:01:02

bam coverage

L 5/17

variants

Alignment (reference: reconstructed gene haplotype 1)



HLA-DQA2*01:01:01:02 (identity: 99.79%)

Locus: HLA-DQB1

Resolution: 4th field

Full typing result:

HLA-DQB1*05:01:01:03

bam coverage

— 13

variants

Alignment (reference: reconstructed gene haplotype 1)

0.0kb 1.0kb 2.0kb 3.0kb 4.0kb 5.0kb 6.0kb 7.0kb

HLA-DQB1*05:01:01:03 (identity: 100.00%)

Locus: HLA-DQB1

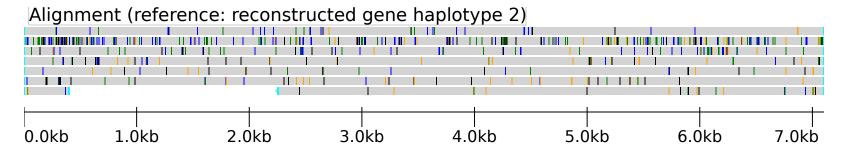
Resolution: 4th field

Full typing result:

HLA-DQB1*06:03:01:01

bam coverage

variants



HLA-DQB1*06:03:01:01 (identity: 100.00%)

Locus: HLA-DQB2

Resolution: 4th field

Full typing result:

HLA-DQB2*01:02:02:01

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 1)

0.0kb 1.0kb 2.0kb 3.0kb 4.0kb 5.0kb 6.0kb 7.0kb

HLA-DQB2*01:02:02:01 (identity: 99.99%)

Locus: HLA-DQB2

Resolution: 4th field

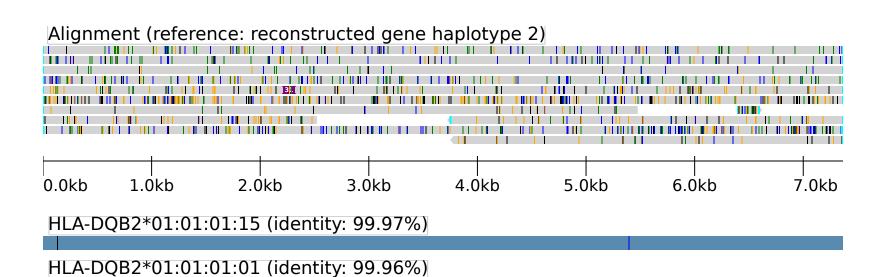
Full typing result:

HLA-DQB2*01:01:01:15 | HLA-DQB2*01:01:01 | HLA-DQB2*01:01:02

bam coverage

Bear the control of t

variants



HLA-DQB2*01:01:01:02 (identity: 99.96%)

Locus: HLA-DRA

Resolution: 4th field

Full typing result:

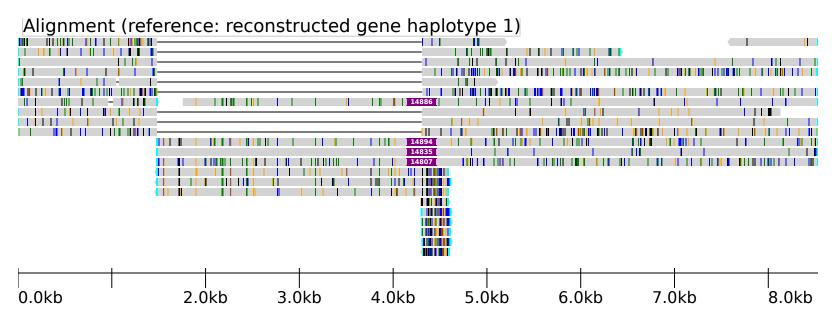
HLA-DRA*01:01:01:05

bam coverage

19

variants





HLA-DRA*01:01:01:05 (identity: 50.59%)

Locus: HLA-DRA

Resolution: 4th field

Full typing result:

HLA-DRA*01:01:01:01 HLA-DRA*01:01:01:07

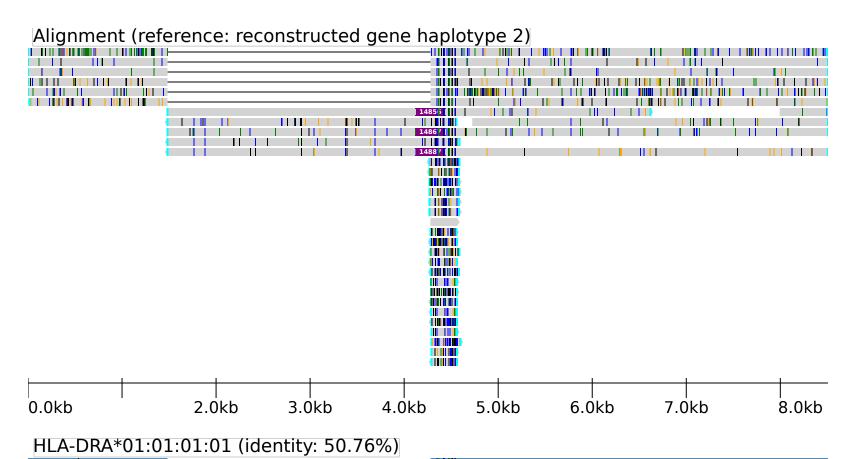
HLA-DRA*01:01:01:07 (identity: 50.76%)

bam coverage

■ 28 19

variants





Locus: HLA-DRB1

Resolution: 4th field

Full typing result:

HLA-DRB1*13:01:01:02 HLA-DRB1*13:01:01:01

bam coverage

variants



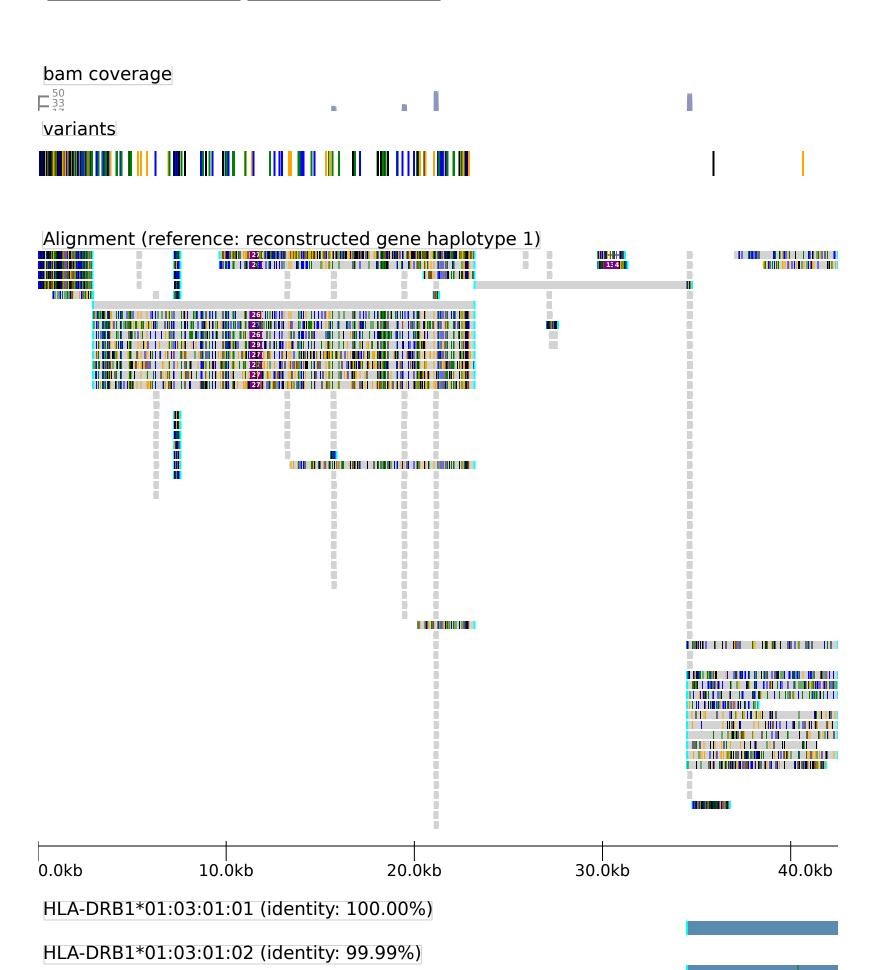
Alignment (reference: reconstructed gene haplotype 2) 213 434 37 30 3(: 31! 3(1 31 315 31 14! 0.0kb2.5kb 3.75kb 5.0kb 6.25kb 7.5kb 8.75kb 11.25kb 13.75kb

HLA-DRB1*13:01:01:02 (identity: 100.00%)

HLA-DRB1*13:01:01:01 (identity: 99.99%)

Sample: HG01256 Locus: HLA-DRB1 Resolution: 4th field Full typing result:

HLA-DRB1*01:03:01:01 HLA-DRB1*01:03:01:02



Sample: HG01256 Locus: HLA-DRB3 Resolution: 4th field Full typing result: HLA-DRB3*02:02:01:02 bam coverage **■** 42 28 variants Alignment (reference: reconstructed gene haplotype 1) 2: 0.0kb 2.5kb 6.25kb 7.5kb 8.75kb 11.25kb 3.75kb 5.0kb HLA-DRB3*02:02:01:02 (identity: 100.00%)

Locus: HLA-DRB4

Resolution: 4th field

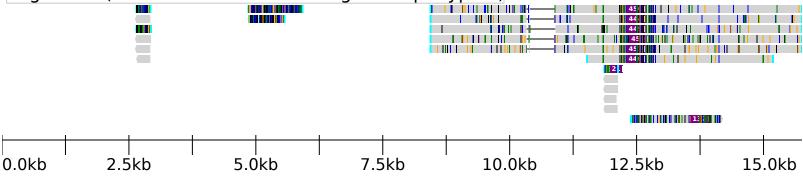
Full typing result:

HLA-DRB4*01:03:01:18 | HLA-DRB4*01:03:01:03 | HLA-DRB4*01:03:01:01

bam coverage

Variants

Alignment (reference: reconstructed gene haplotype 1)



HLA-DRB4*01:03:01:18 (identity: 88.89%)

HLA-DRB4*01:03:01:03 (identity: 88.89%)

HLA-DRB4*01:03:01:01 (identity: 88.89%)

Locus: HLA-DRB4

Resolution: 4th field

Full typing result:

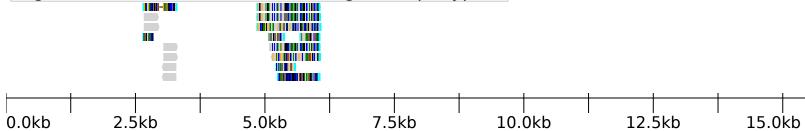
HLA-DRB4*01:01:01:01 | HLA-DRB4*01:01:12 | HLA-DRB4*02:01N

bam coverage

L

variants

Alignment (reference: reconstructed gene haplotype 2)



HLA-DRB4*01:01:01:01 (identity: 94.32%)

HLA-DRB4*01:01:12 (identity: 94.32%)

HLA-DRB4*02:01N (identity: 94.32%)

Locus: HLA-DRB5

Resolution: 4th field

Full typing result:

HLA-DRB5*01:01:02 | HLA-DRB5*01:01:03 | HLA-DRB5*01:01:05

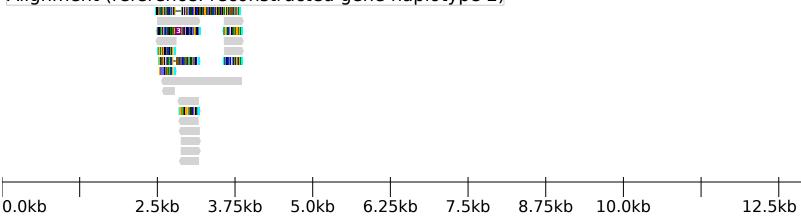
HLA-DRB5*01:01:01:06

bam coverage

F⁷/₂

variants

Alignment (reference: reconstructed gene haplotype 2)



HLA-DRB5*01:01:01:02 (identity: 79.25%)

HLA-DRB5*01:01:01:03 (identity: 79.25%)

HLA-DRB5*01:01:01:05 (identity: 79.25%)

HLA-DRB5*01:01:01:06 (identity: 79.25%)

Sample: HG01256 **Locus: HLA-DRB5** Resolution: 4th field Full typing result: HLA-DRB5*01:01:01:01 | HLA-DRB5*01:131N bam coverage **□** 25 17 variants Alignment (reference: reconstructed gene haplotype 1) 14/I 0.0kb 2.5kb 5.0kb 6.25kb 7.5kb 8.75kb 11.25kb 3.75kb HLA-DRB5*01:01:01:01 (identity: 98.02%) HLA-DRB5*01:131N (identity: 98.02%)

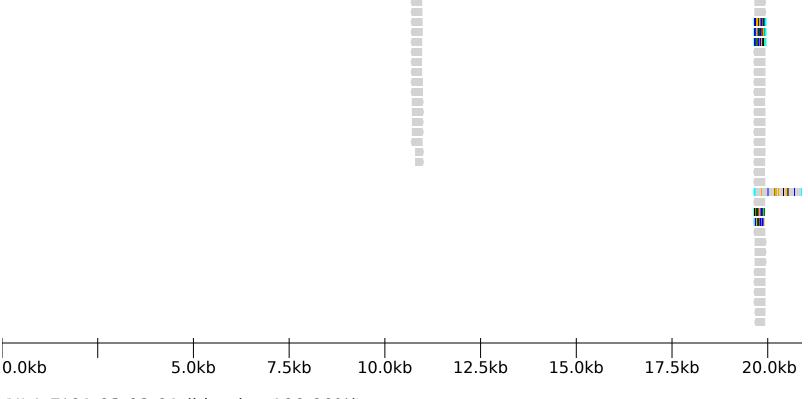
Sample: HG01256 **Locus: HLA-E**

Resolution: 4th field



HLA-E*01:03:02:01 HLA-E*01:03:02:34





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

HLA-E*01:03:02:34 (identity: 100.00%)

Locus: HLA-F

Resolution: 4th field

Full typing result:

bam coverage

variants

HLA-F*01:01:01:17 (identity: 100.00%)

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

HLA-F*01:01:01:13 (identity: 99.97%)

Locus: HLA-F

Resolution: 4th field

Full typing result:

HLA-F*01:01:01:08

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 1)

0.0kb 1.0kb 2.0kb 3.0kb

HLA-F*01:01:08 (identity: 100.00%)

Locus: HLA-G

Resolution: 4th field

Full typing result:

HLA-G*01:01:27 HLA-G*01:37 HLA-G*01:01:01:14Q

HLA-G*01:01:01:29 HLA-G*01:49 HLA-G*01:01:01

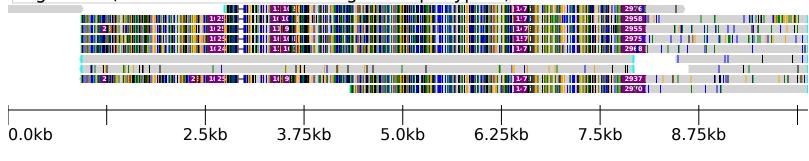
HLA-G*01:01:01:18 HLA-G*01:41 HLA-G*01:01:01:16

HLA-G*01:01:01:33

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 1)



HLA-G*01:01:27 (identity: -122.94%)

HLA-G*01:37 (identity: 100.00%)

HLA-G*01:01:14Q (identity: -122.94%)

HLA-G*01:01:01:29 (identity: -122.94%)

HLA-G*01:49 (identity: -122.94%)

HLA-G*01:01:01:01 (identity: -122.91%)

HLA-G*01:01:01:18 (identity: -122.94%)

HLA-G*01:41 (identity: 100.00%)

HLA-G*01:01:01:16 (identity: -122.94%)

HLA-G*01:01:01:33 (identity: -122.94%)

Locus: HLA-H

Resolution: 4th field

Full typing result:

HLA-H*01:01:01:01

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 1)

0.0kb 1.0kb 2.0kb 3.0kb

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

Locus: HLA-J

Resolution: 4th field

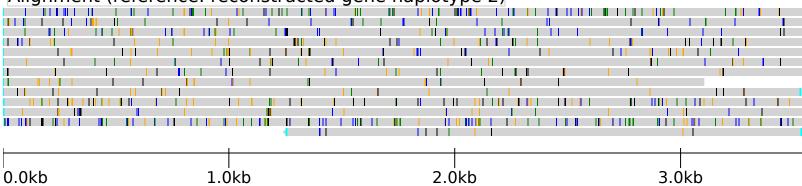
Full typing result:

HLA-J*01:01:11 HLA-J*01:01:05 HLA-J*01:01:17

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 2)



HLA-J*01:01:11 (identity: 100.00%)

HLA-J*01:01:05 (identity: 99.94%)

HLA-J*01:01:17 (identity: 99.97%)

Locus: HLA-J

Resolution: 4th field

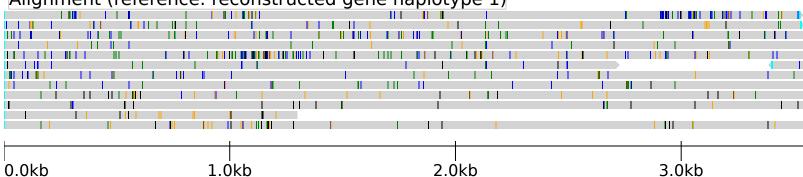
Full typing result:

HLA-J*01:01:05

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 1)



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

Locus: HLA-K

Resolution: 4th field

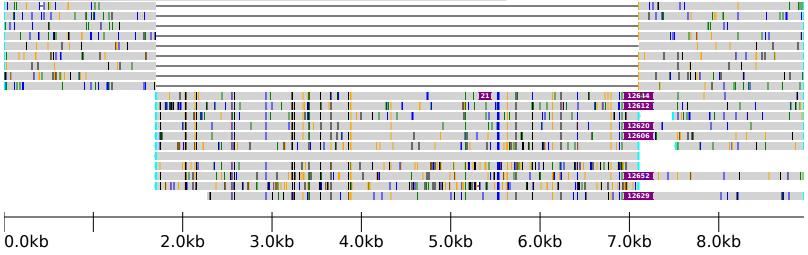
Full typing result:

HLA-K*01:02

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 1)



HLA-K*01:02 (identity: -51.90%)

Locus: HLA-L

Resolution: 4th field

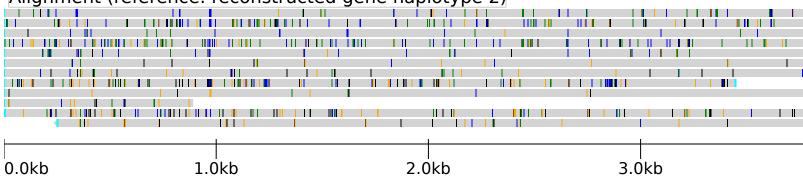
Full typing result:

HLA-L*01:01:01:01

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 2)



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

Locus: HLA-L

Resolution: 4th field

Full typing result:

HLA-L*01:01:01:02

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 1)

0.0kb 1.0kb 2.0kb 3.0kb

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

Locus: HLA-P

Resolution: 4th field

Full typing result:

HLA-P*02:01:01:01

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 1)

0 250 500 750 1,000 1,250 1,500 1,750 2,000 2,250 2,500 2,750

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

Locus: HLA-T

Resolution: 4th field

Full typing result:

HLA-T*01:01:05

bam coverage

| variants

Alignment (reference: reconstructed gene haplotype 1)

0 250 500 750 1,000 1,250 1,500 1,750 2,000 2,250

HLA-T*01:01:05 (identity: 99.96%)

Locus: HLA-T

Resolution: 4th field

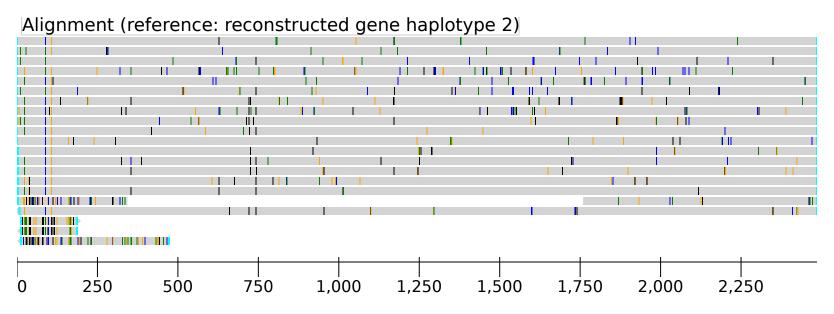
Full typing result:

HLA-T*01:01:01:02

bam coverage

variants

II .



HLA-T*01:01:01:02 (identity: 99.88%)

Locus: HLA-U

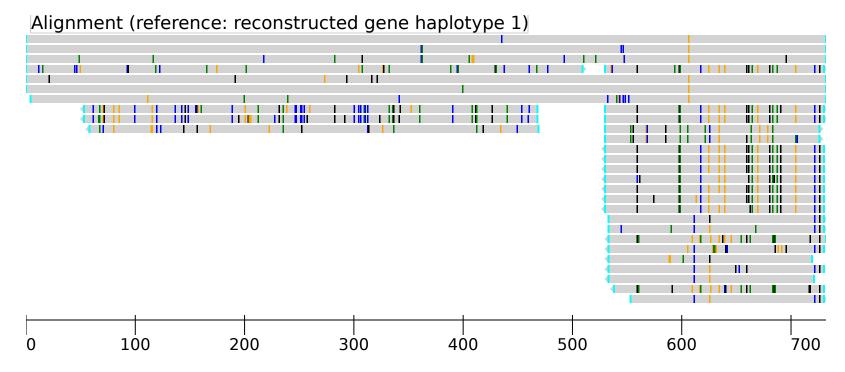
Resolution: 4th field

Full typing result:

HLA-U*01:03

bam coverage

variants



HLA-U*01:03 (identity: 99.86%)

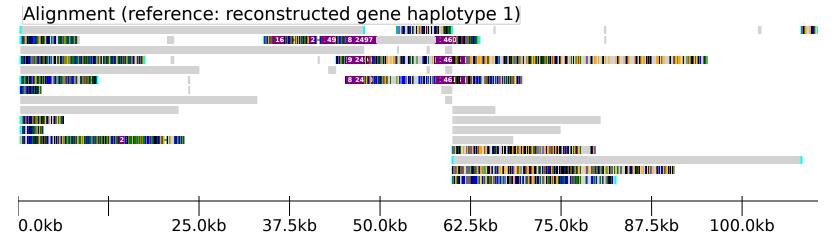
Locus: HLA-W

Resolution: 4th field

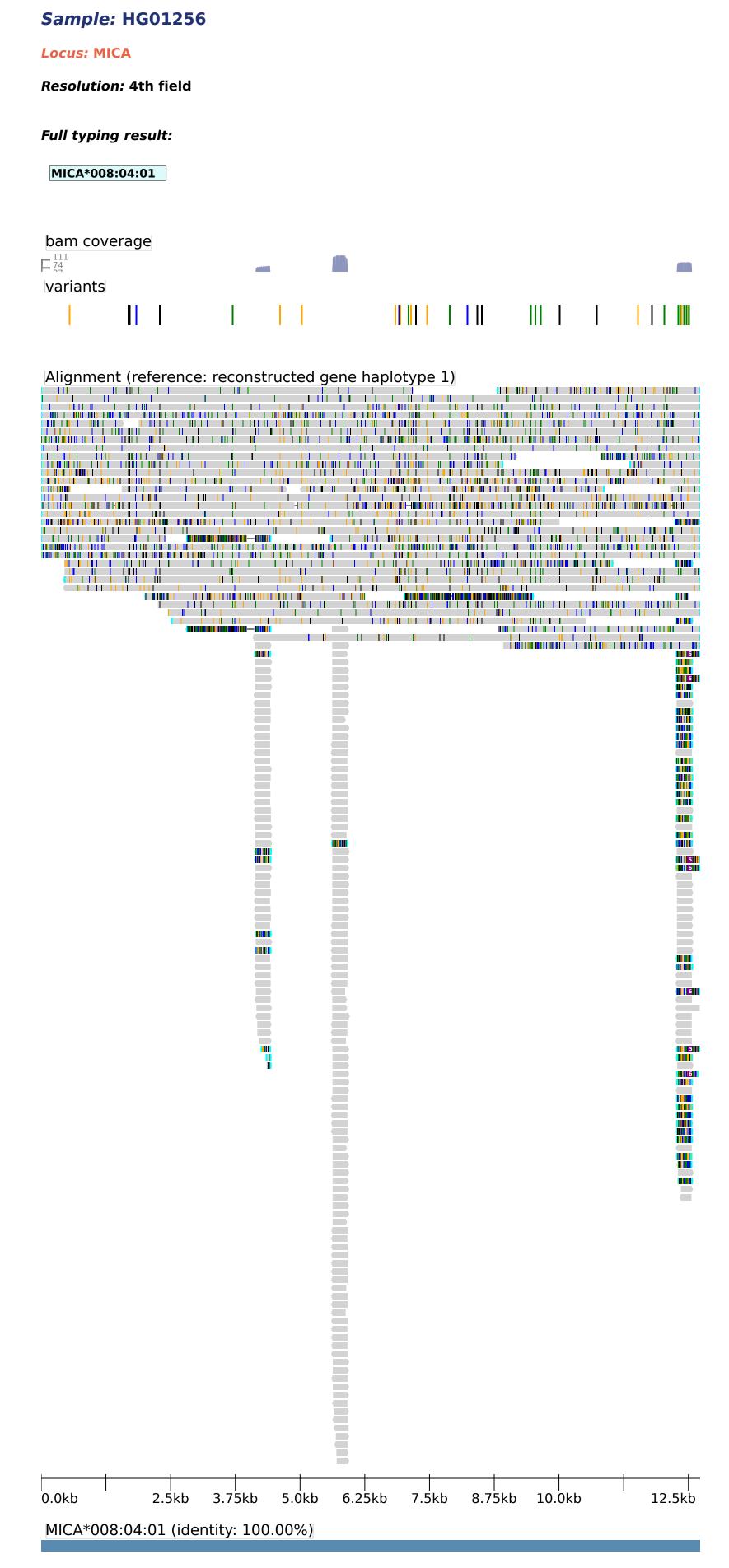
Full typing result:

HLA-W*03:01:01:01





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



Locus: MICA Resolution: 4th field Full typing result: MICA*010:01:01 | MICA*010:01:05 bam coverage **□** 109 variants Alignment (reference: reconstructed gene haplotype 2) -11111 -11111 -11111 - | | | | - | | | | -11111 -||||| -1111 35 -||||| - | | | | | -1111 -11111 -- | | | --11111 -6 16 5. 5 6 6 6 3 IIII 11.25kb 0.0kb 2.5kb 3.75kb 5.0kb 6.25kb 7.5kb 8.75kb MICA*010:01:01 (identity: 99.95%) MICA*010:01:05 (identity: 95.47%) -||||

Sample: HG01256

Locus: MICB Resolution: 4th field Full typing result: MICB*052 bam coverage Z01 134 variants Alignment (reference: reconstructed gene haplotype 1) Alignment (reference: reconstructed gene haplotype 1) 24 1000 0.0kb 5.0kb 8.75kb 2.5kb 3.75kb 6.25kb 7.5kb 10.0kb 12.5kb MICB*052 (identity: 99.94%)

Sample: HG01256

Sample: HG01256 Locus: MICB Resolution: 4th field Full typing result: MICB*002:01:01 bam coverage **2**02 variants Alignment (reference: reconstructed gene haplotype 2) 1(ш 32 31 32 2 11 mile il 1 mil Ш Ш 9 1 0.0kb 17.5kb 2.5kb 5.0kb 7.5kb 10.0kb 12.5kb 15.0kb MICB*002:01:01 (identity: 99.93%)

Locus: TAP1

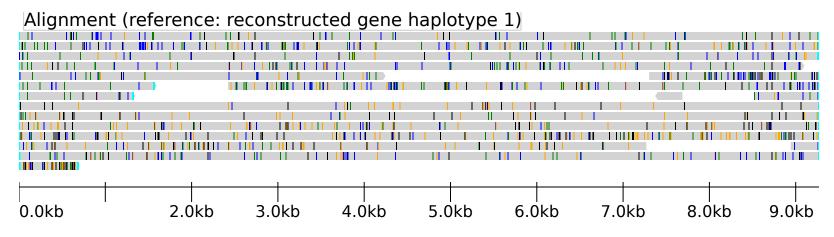
Resolution: 4th field

Full typing result:

TAP1*01:01:01:01

bam coverage

variants



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

Locus: TAP1

Resolution: 4th field

Full typing result:

TAP1*01:01:01:03

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 2)

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

TAP1*01:01:01:03 (identity: 99.98%)

Locus: TAP2

Resolution: 4th field

Full typing result:

TAP2*02:01:02:02

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 1) 7.5kb 0.0kb 2.5kb 5.0kb 6.25kb 8.75kb 10.0kb 3.75kb

TAP2*02:01:02:02 (identity: 100.00%)

Locus: TAP2

Resolution: 4th field

Full typing result:

TAP2*02:01:02:01

bam coverage

variants

