Locus: HLA-A

Resolution: 4th field

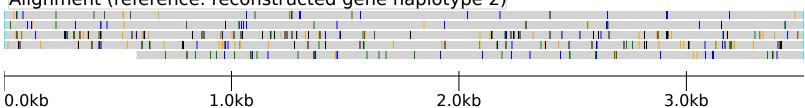
Full typing result:

HLA-A*68:02:21 HLA-A*68:02:01:01

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 2)



HLA-A*68:02:21 (identity: 100.00%)

HLA-A*68:02:01:01 (identity: 99.97%)

Locus: HLA-A

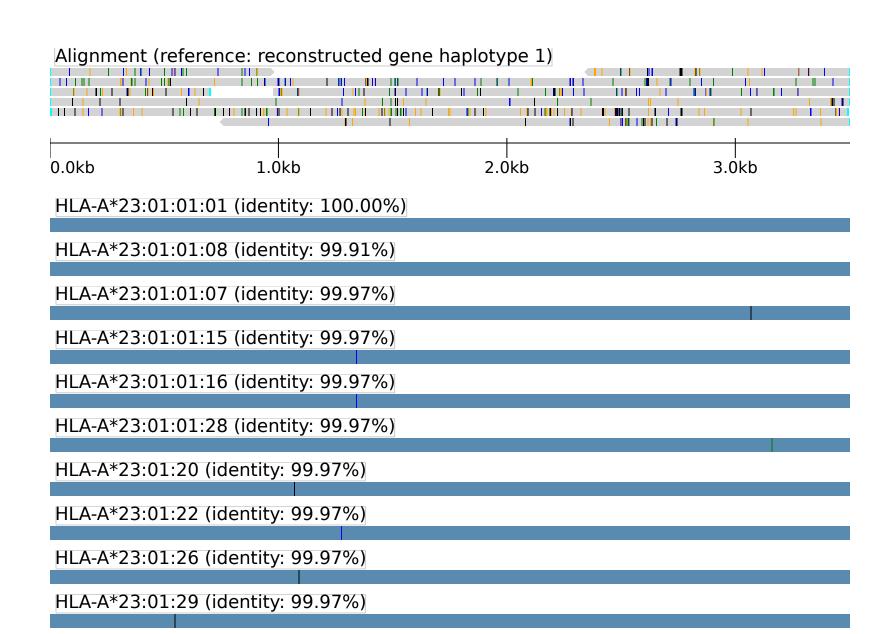
Resolution: 4th field

Full typing result:

HLA-A*23:01:01:01	HLA-A*23:01:01	L:08	HLA-A*23:01:01:07	
III A A*22-01-01-15	III A A*22-01-01	1-16	III A A¥22.01.01.20	
HLA-A*23:01:01:15 HLA-A*23:01:01:16 HLA-A*23:01:01:28				
HLA-A*23:01:20	ILA-A*23:01:22	HLA-	A*23:01:26	
HLA-A*23:01:29	ILA-A*23:01:30	HLA-	A*23:01:33	
HLA-A*23:01:38	ILA-A*23:01:40	HLA-	A*23:106N	

bam coverage

variants



Locus: HLA-B

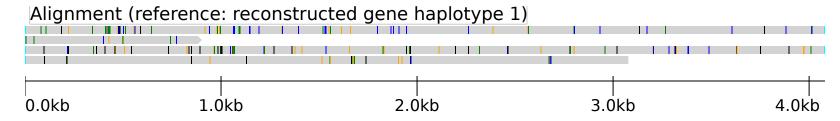
Resolution: 4th field

Full typing result:

HLA-B*07:02:01:118 | HLA-B*07:02:01:01 | HLA-B*07:120

bam coverage

variants



HLA-B*07:02:01:118 (identity: 99.95%)

HLA-B*07:02:01:01 (identity: 99.93%)

HLA-B*07:120 (identity: 99.93%)

Locus: HLA-B

Resolution: 4th field

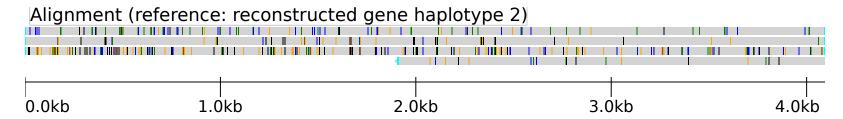
Full typing result:

HLA-B*15:10:01:01

bam coverage

3

variants

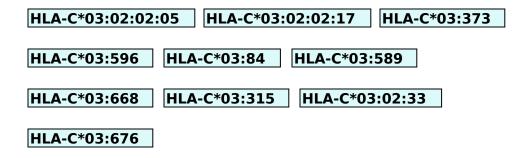


HLA-B*15:10:01:01 (identity: 100.00%)

Locus: HLA-C

Resolution: 4th field

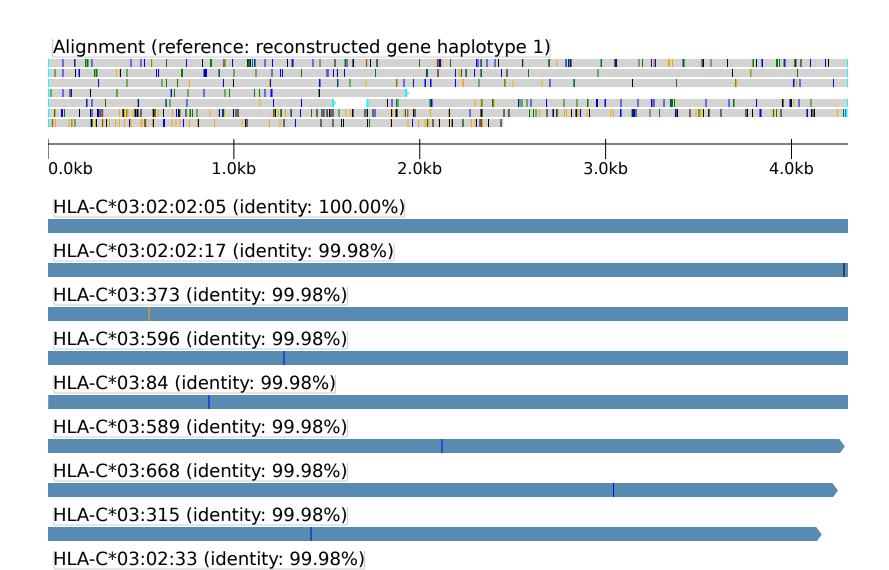
Full typing result:



bam coverage

HLA-C*03:676 (identity: 99.98%)

variants



Locus: HLA-DMA Resolution: 4th field Full typing result: HLA-DMA*01:01:01:02 bam coverage **□** 18 variants Alignment (reference: reconstructed gene haplotype 1) III Ш 3 - 4 2 17.5kb 0.0kb 2.5kb 5.0kb 7.5kb 10.0kb 12.5kb 15.0kb HLA-DMA*01:01:01:02 (identity: 99.94%)

Sample: NA19128

Locus: HLA-DMB

Resolution: 4th field

Full typing result:

HLA-DMB*01:01:01:44

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 1)

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

HLA-DMB*01:01:01:44 (identity: 100.00%)

Locus: HLA-DMB

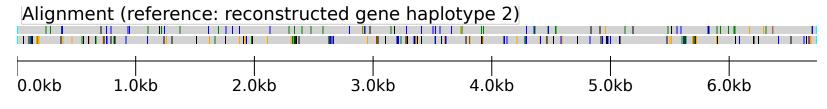
Resolution: 4th field

Full typing result:

HLA-DMB*01:03:01:01

bam coverage

variants



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

Locus: HLA-DOA

Resolution: 4th field

Full typing result:

HLA-DOA*01:01:02:08 | HLA-DOA*01:01:02:45 | HLA-DOA*01:01:02:17

HLA-DOA*01:01:02:34

bam coverage

. -

variants

HLA-DOA*01:01:02:08 (identity: 100.00%)

HLA-DOA*01:01:02:45 (identity: 99.97%)

HLA-DOA*01:01:02:17 (identity: 99.97%)

HLA-DOA*01:01:02:34 (identity: 99.97%)

Locus: HLA-DOA

Resolution: 4th field

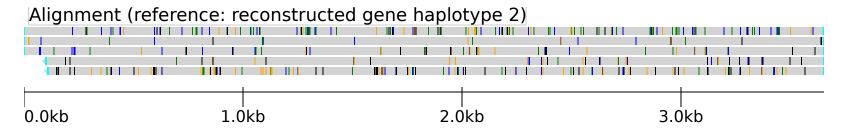
Full typing result:

HLA-DOA*01:01:08 HLA-DOA*01:01:04:03

bam coverage

53, 1

variants



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

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

Locus: HLA-DOB

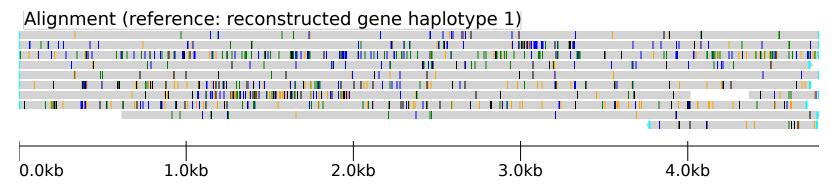
Resolution: 4th field

Full typing result:

HLA-DOB*01:02:01:01

bam coverage

variants



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

Locus: HLA-DPA1

Resolution: 4th field

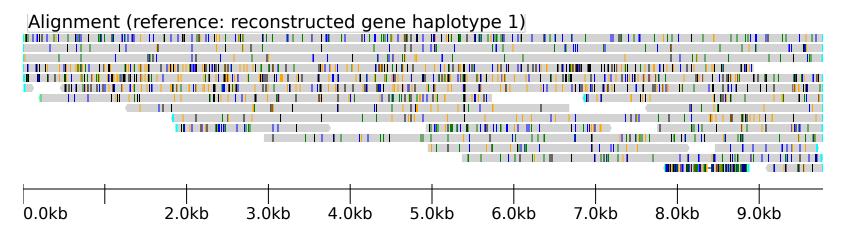
Full typing result:

HLA-DPA1*02:01:08:03

bam coverage

variants

| ||



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

Locus: HLA-DPA2

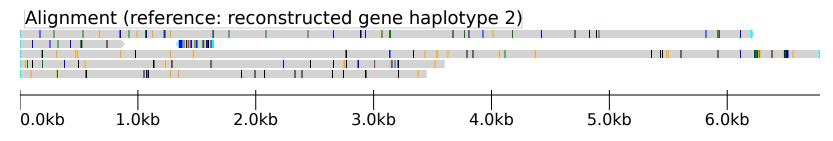
Resolution: 4th field

Full typing result:

HLA-DPA2*01:01:02

bam coverage

variants



HLA-DPA2*01:01:02 (identity: 98.51%)

Locus: HLA-DPA2

Resolution: 4th field

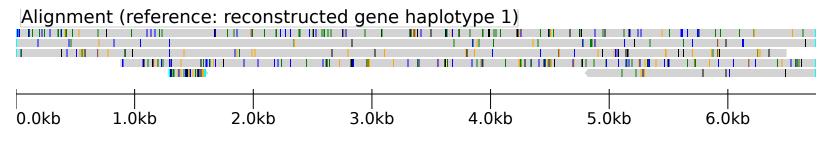
Full typing result:

HLA-DPA2*01:01:01:03

bam coverage

5 3

variants



HLA-DPA2*01:01:01:03 (identity: 99.97%)

Locus: HLA-DPB1

Resolution: 4th field

Full typing result:

HLA-DPB1*17:01:01:01 HLA-DPB1*1233:01 HLA-DPB1*1367:01

HLA-DPB1*1394:01 | HLA-DPB1*1397:01 | HLA-DPB1*1555:01

HLA-DPB1*1556:01 | HLA-DPB1*17:01:01:03 | HLA-DPB1*17:01:01:04

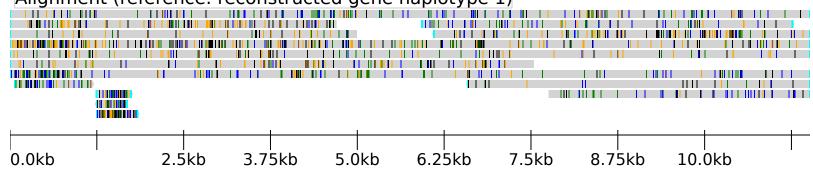
HLA-DPB1*17:01:01:05 | HLA-DPB1*17:01:01:07 | HLA-DPB1*17:01:01:08

HLA-DPB1*17:01:01:09 | HLA-DPB1*17:01:04 | HLA-DPB1*245:01

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 1)



HLA-DPB1*17:01:01:01 (identity: 99.99%)

HLA-DPB1*1233:01 (identity: 99.98%)

HLA-DPB1*1367:01 (identity: 99.98%)

HLA-DPB1*1394:01 (identity: 99.98%)

HLA-DPB1*1397:01 (identity: 99.98%)

HLA-DPB1*1555:01 (identity: 99.98%)

HLA-DPB1*1556:01 (identity: 99.98%)

HLA-DPB1*17:01:01:03 (identity: 99.98%)

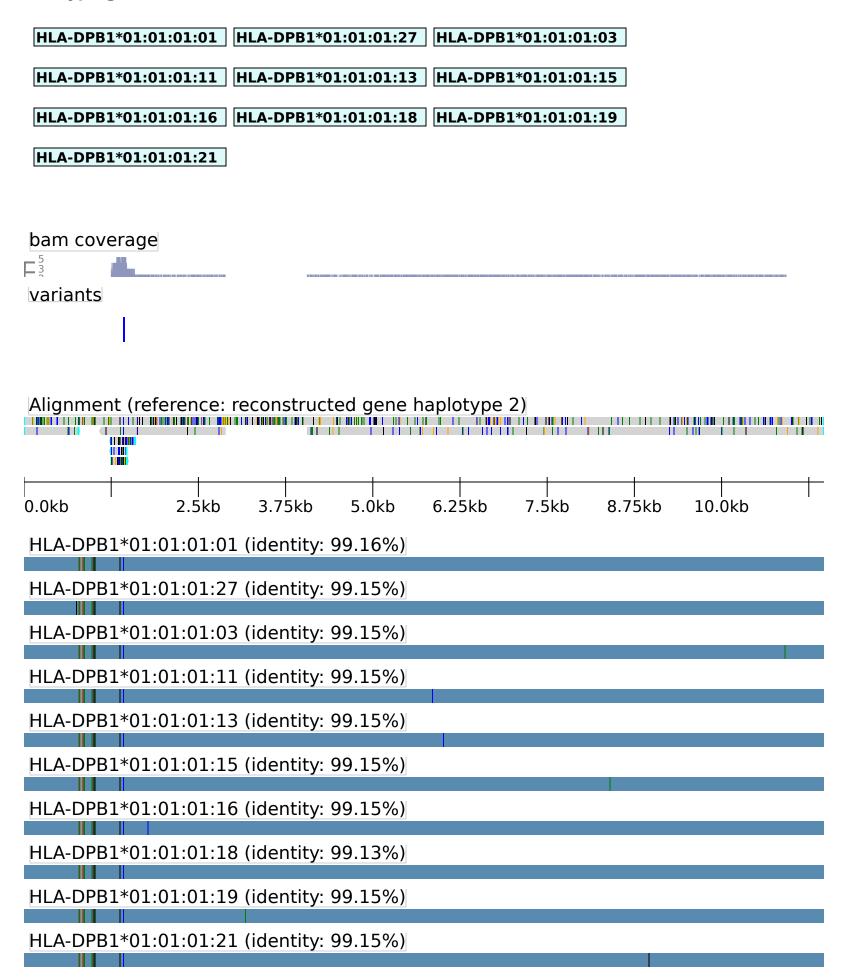
HLA-DPB1*17:01:01:04 (identity: 99.98%)

HLA-DPB1*17:01:01:05 (identity: 99.98%)

Locus: HLA-DPB1

Resolution: 4th field

Full typing result:



Locus: HLA-DPB2 Resolution: 4th field Full typing result: HLA-DPB2*03:01:01:01 bam coverage **■** 39 26 variants Alignment (reference: reconstructed gene haplotype 2) rindrodi modili ili ili ili ili ili ili ili ĪĪ III 0.0kb 2.5kb 5.0kb 7.5kb 10.0kb 12.5kb 15.0kb 17.5kb HLA-DPB2*03:01:01:01 (identity: 99.87%)

Sample: NA19128

Locus: HLA-DPB2

Resolution: 4th field

Full typing result:

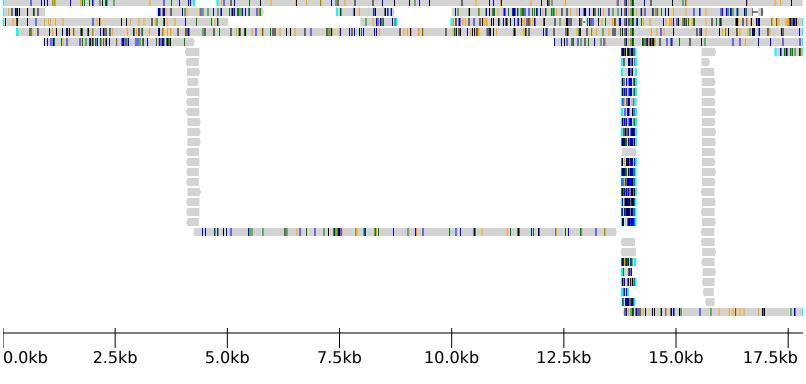
HLA-DPB2*03:01:01:01

bam coverage

□ 27 18

variants





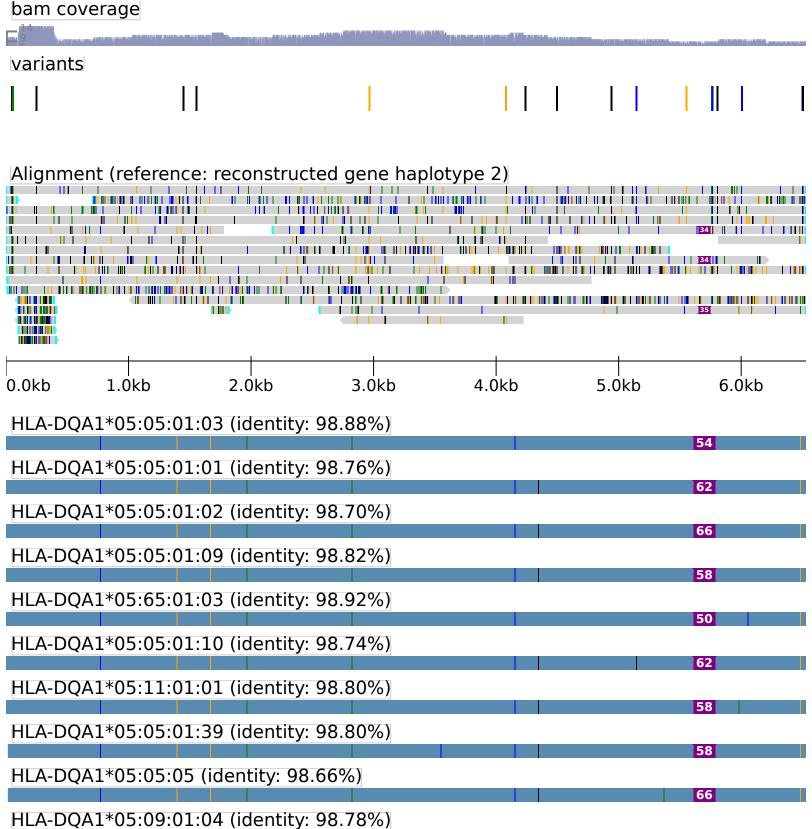
HLA-DPB2*03:01:01:01 (identity: 99.87%)

Locus: HLA-DQA1

Resolution: 4th field

Full typing result:

HLA-DQA1*05:05:01:03	HLA-DQA1*05:05:01:01	HLA-DQA1*05:05:01:02
HLA-DQA1*05:05:01:09	HLA-DQA1*05:65:01:03	HLA-DQA1*05:05:01:10
HLA-DQA1*05:11:01:01	HLA-DQA1*05:05:01:39	HLA-DQA1*05:05:05
HLA-DQA1*05:09:01:04		



Locus: HLA-DQA1

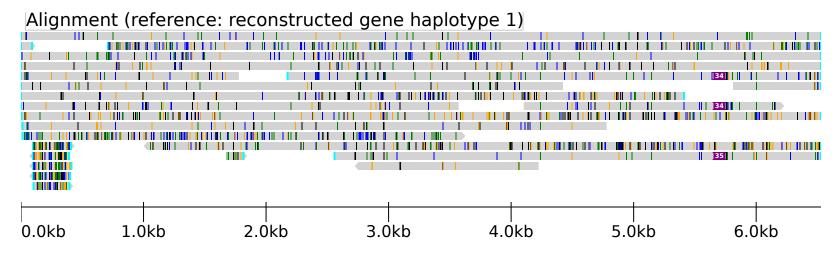
Resolution: 4th field

Full typing result:

HLA-DQA1*05:01:01:01

bam coverage





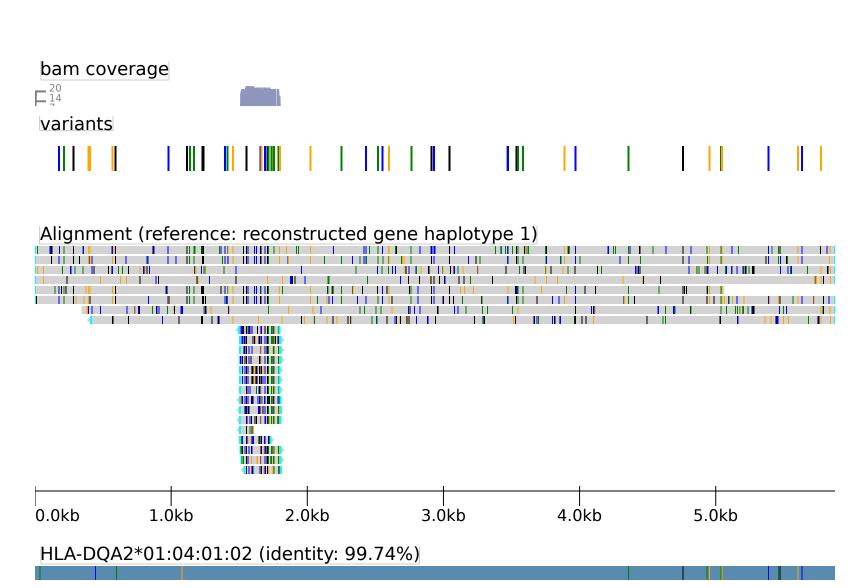
HLA-DQA1*05:01:01:01 (identity: 100.00%)

Locus: HLA-DQA2

Resolution: 4th field

Full typing result:

HLA-DQA2*01:04:01:02



Locus: HLA-DQB1

Resolution: 4th field

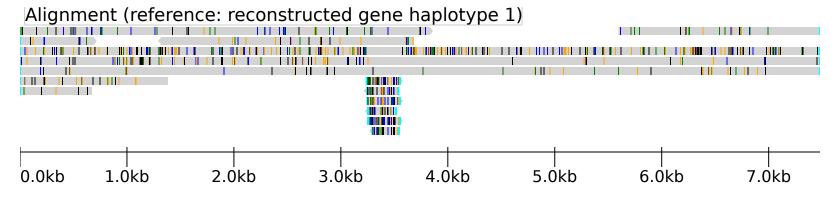
Full typing result:

HLA-DQB1*02:01:01:01

bam coverage

variants





HLA-DQB1*02:01:01:01 (identity: 99.99%)

Locus: HLA-DQB1

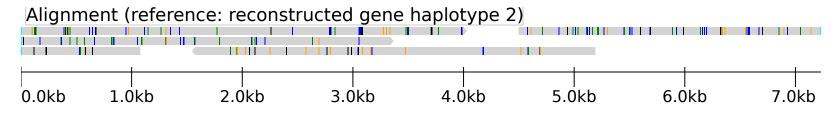
Resolution: 4th field

Full typing result:

HLA-DQB1*03:19:01:01

bam coverage

variants



HLA-DQB1*03:19:01:01 (identity: 100.00%)

Locus: HLA-DQB2

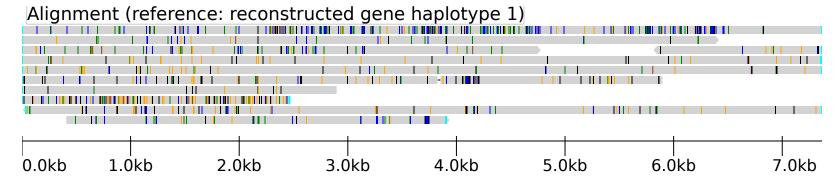
Resolution: 4th field

Full typing result:

HLA-DQB2*01:01:01:04 | HLA-DQB2*01:01:03



variants



HLA-DQB2*01:01:01:04 (identity: 99.96%)

HLA-DQB2*01:01:01:03 (identity: 99.95%)

Locus: HLA-DQB2

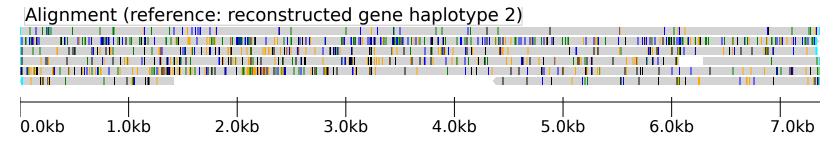
Resolution: 4th field

Full typing result:

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

bam coverage

variants



HLA-DQB2*01:01:01:15 (identity: 100.00%)

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

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

Locus: HLA-DRA

Resolution: 4th field

Full typing result:

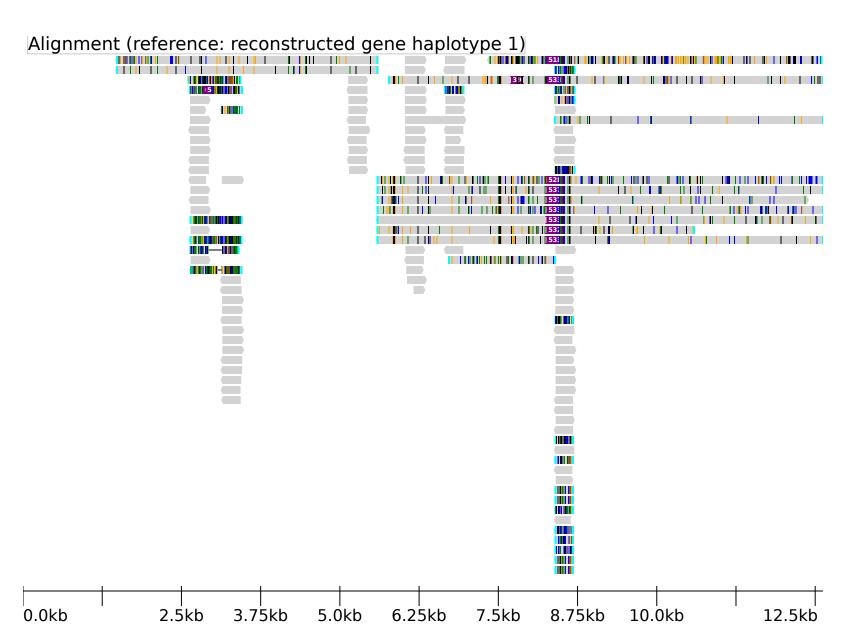
HLA-DRA*01:01:01:01

bam coverage

29

variants





HLA-DRA*01:01:01:01 (identity: 89.53%)

Locus: HLA-DRB1

Resolution: 4th field

Full typing result:

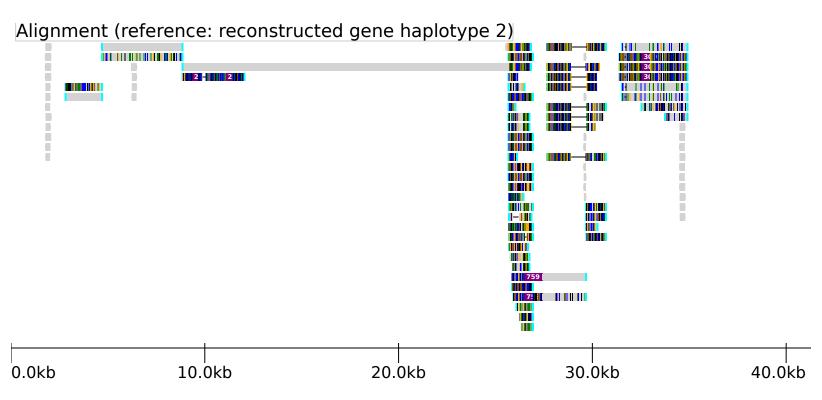
HLA-DRB1*09:21:01:02 | HLA-DRB1*09:01:02:04

bam coverage

— 22 15 ...

variants





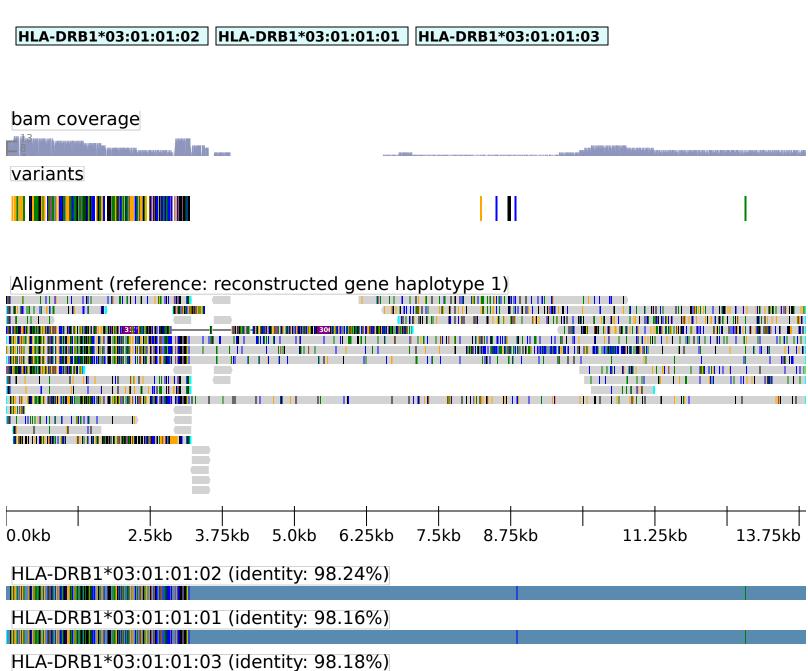
HLA-DRB1*09:21:01:02 (identity: 41.71%)

HLA-DRB1*09:01:02:04 (identity: 41.70%)

Locus: HLA-DRB1

Resolution: 4th field

Full typing result:

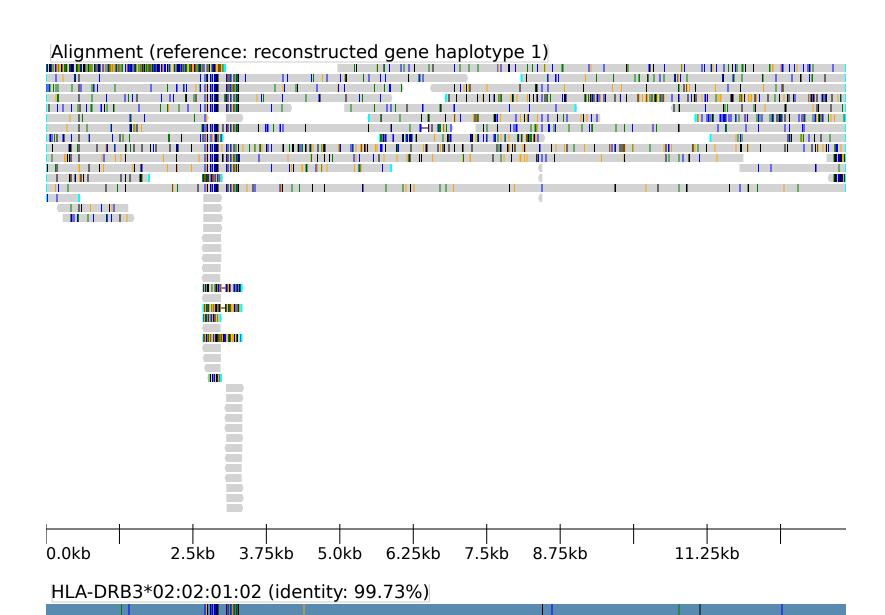


Sample: NA19128 Locus: HLA-DRB3 Resolution: 4th field

Full typing result:

HLA-DRB3*02:02:01:02

bam coverage 26 17 variants



Locus: HLA-DRB3

Resolution: 4th field

Full typing result:

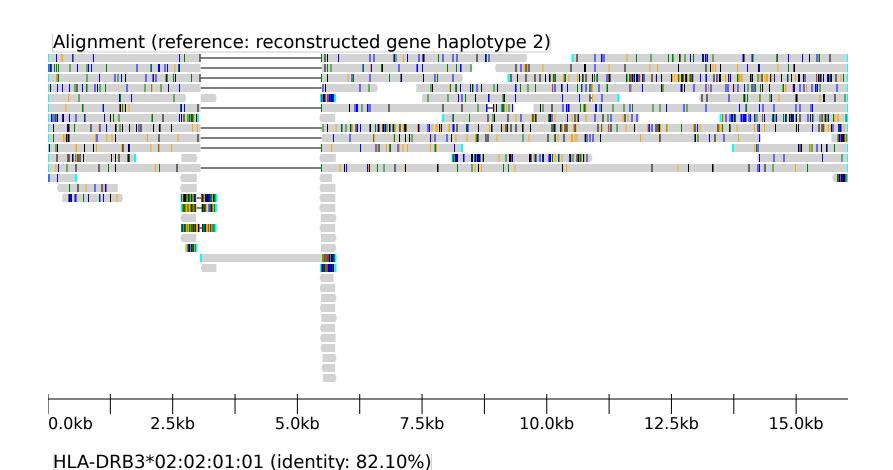
HLA-DRB3*02:02:01:01

bam coverage

29 19

variants



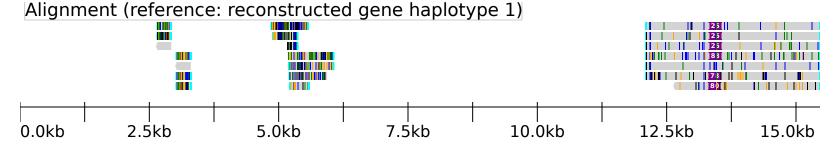


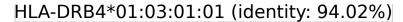
Locus: HLA-DRB4

Resolution: 4th field

Full typing result:

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





HLA-DRB4*01:03:01:03 (identity: 94.02%)

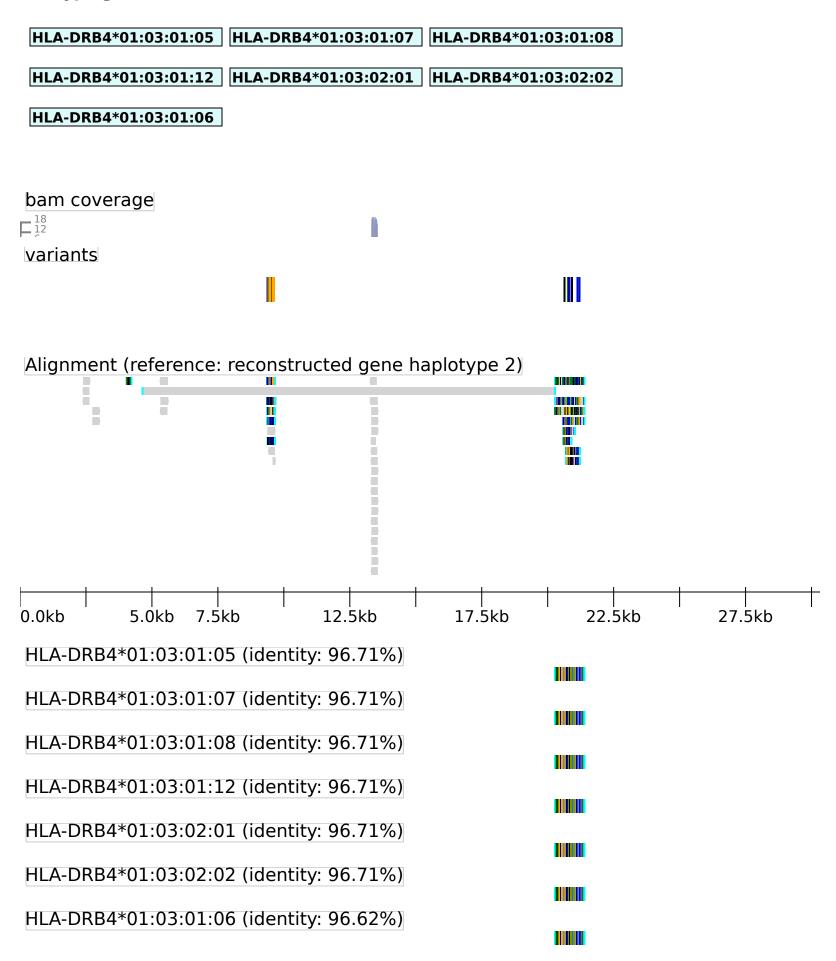
HLA-DRB4*01:03:01:18 (identity: 94.02%)



Locus: HLA-DRB4

Resolution: 4th field

Full typing result:

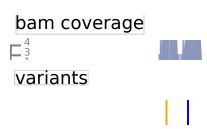


Locus: HLA-DRB5

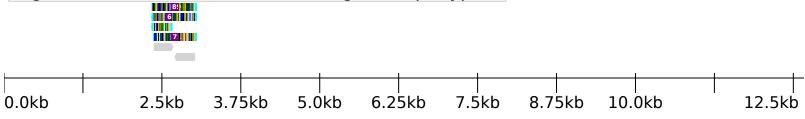
Resolution: 4th field

Full typing result:

HLA-DRB5*01:01:01:03



Alignment (reference: reconstructed gene haplotype 2)



HLA-DRB5*01:01:01:03 (identity: 97.42%)

Locus: HLA-DRB5

Resolution: 4th field

Full typing result:

HLA-DRB5*01:02:01

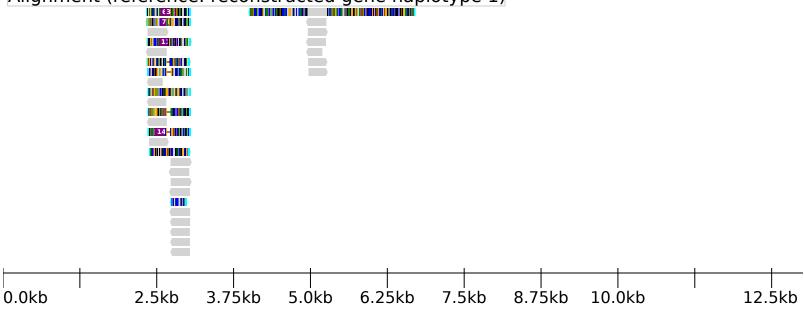
bam coverage

□ 17 11

variants



Alignment (reference: reconstructed gene haplotype 1)



HLA-DRB5*01:02:01 (identity: 63.76%)

Locus: HLA-E

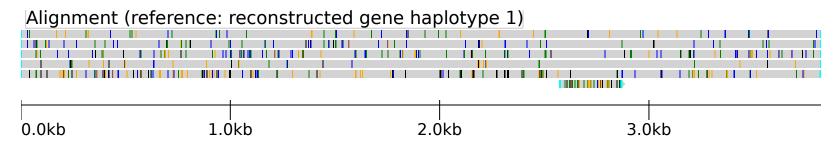
Resolution: 4th field

Full typing result:

HLA-E*01:01:01:01

bam coverage

variants



HLA-E*01:01:01:01 (identity: 99.97%)

Locus: HLA-E

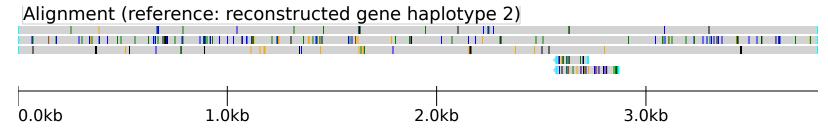
Resolution: 4th field

Full typing result:

HLA-E*01:03:02:01

bam coverage

variants



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

Locus: HLA-F

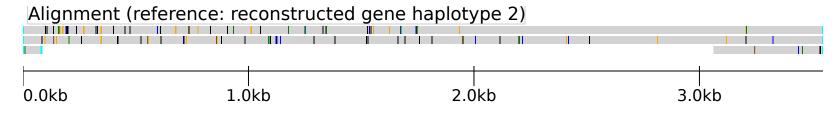
Resolution: 4th field

Full typing result:

HLA-F*01:01:01:24

bam coverage

variants



HLA-F*01:01:18 (identity: 100.00%)

HLA-F*01:01:01:19 (identity: 99.89%)

HLA-F*01:01:01:23 (identity: 99.97%)

HLA-F*01:01:01:24 (identity: 99.97%)

Locus: HLA-F

Resolution: 4th field

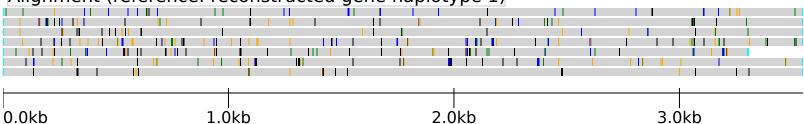
Full typing result:

HLA-F*01:03:01:03

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 1)



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

Locus: HLA-G

Resolution: 4th field

Full typing result:

HLA-G*01:04:04:01

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 1)

0 250 500 750 1,000 1,500 2,000 2,500 3,000

HLA-G*01:04:04:01 (identity: 99.97%)

Locus: HLA-J

Resolution: 4th field

Full typing result:

HLA-J*01:01:01:04

bam coverage

variants

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

Locus: HLA-J

Resolution: 4th field

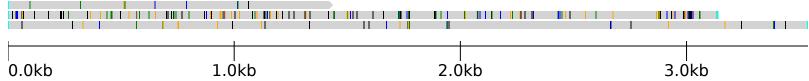
Full typing result:

HLA-J*01:01:09

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 1)



HLA-J*01:01:09 (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)

0.0kb 1.0kb 2.0kb 3.0kb

HLA-K*01:02 (identity: 99.77%)

Locus: HLA-L

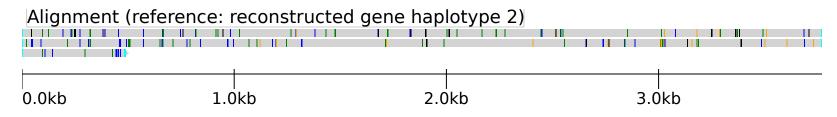
Resolution: 4th field

Full typing result:

HLA-L*01:01:01:01

bam coverage

variants



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

Locus: HLA-L

Resolution: 4th field

Full typing result:

HLA-L*01:03

bam coverage

variants

HLA-L*01:03 (identity: 99.81%)

Locus: HLA-P

Resolution: 4th field

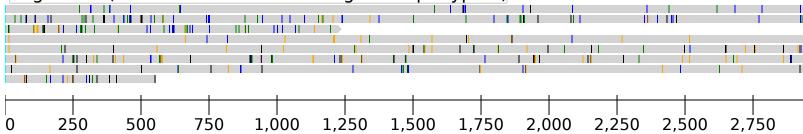
Full typing result:

HLA-P*01:02

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 1)



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

Locus: HLA-P

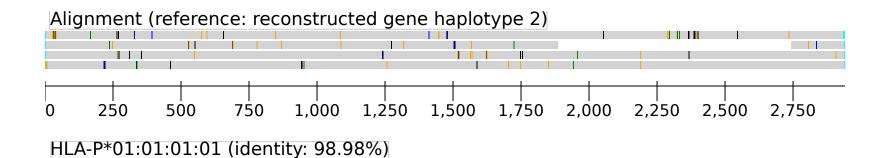
Resolution: 4th field

Full typing result:

HLA-P*01:01:01:01

bam coverage

variants



Locus: HLA-T

Resolution: 4th field

Full typing result:

HLA-T*01:01:01:01

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

HLA-T*01:01:01:01 (identity: 99.92%)

Locus: HLA-U

Resolution: 4th field

Full typing result:

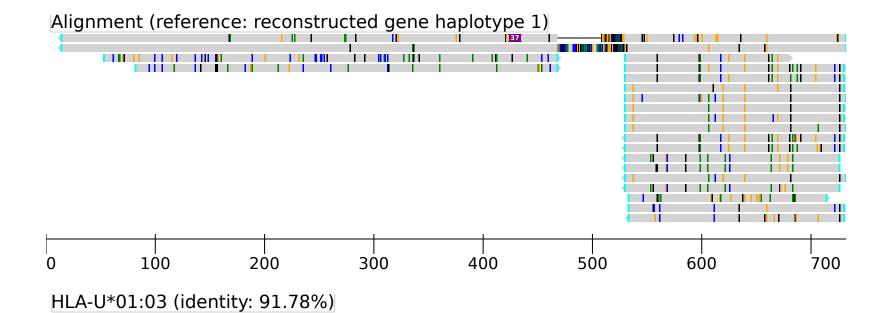
HLA-U*01:03

bam coverage

□ 17 11

variants





Locus: HLA-V

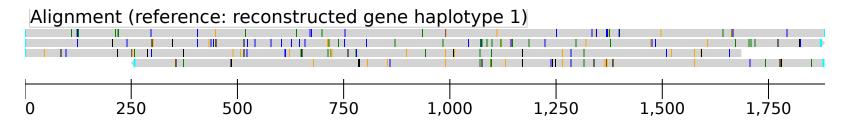
Resolution: 4th field

Full typing result:

HLA-V*01:01:01:03

bam coverage

variants



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

Locus: HLA-W

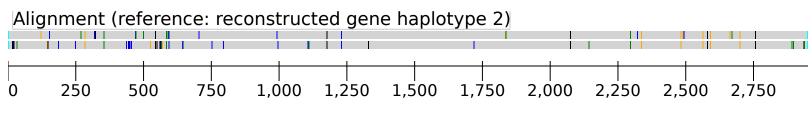
Resolution: 4th field

Full typing result:

HLA-W*05:02

bam coverage

variants



HLA-W*05:02 (identity: 99.93%)

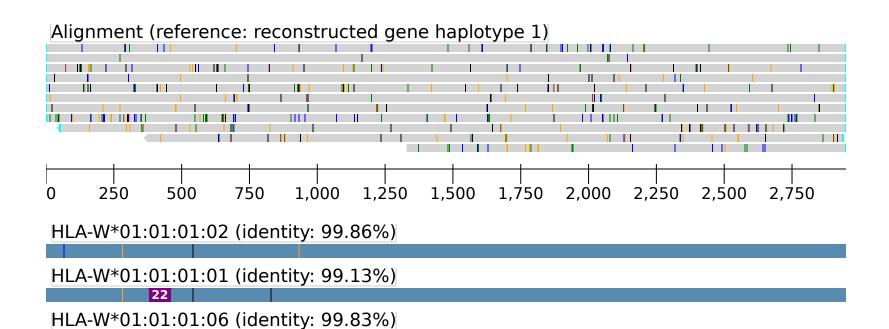
Locus: HLA-W

Resolution: 4th field

Full typing result:

bam coverage

variants



Sample: NA19128 Locus: MICA Resolution: 4th field Full typing result: MICA*008:04:01 MICA*285 bam coverage F 41 variants Ш Alignment (reference: reconstructed gene haplotype 1) 5 11111 6 IIIIII 0.0kb 8.75kb 12.5kb 2.5kb 3.75kb 6.25kb 7.5kb 10.0kb 5.0kb MICA*008:04:01 (identity: 99.75%) MICA*285 (identity: 99.74%)

Sample: NA19128 Locus: MICA Resolution: 4th field Full typing result: MICA*008:13 bam coverage ☐ ⁴¹ 27 variants Alignment (reference: reconstructed gene haplotype 2) <u>i i irii 1 1 ini 11 i 11 i 11 i 1</u> TII 5 - | | | - || || | - | | | - | | | a i de la dia partico de la dia dia de la partico de la companio de la companio de la companio de la companio ī | 5 15

7.5kb

10.0kb

12.5kb

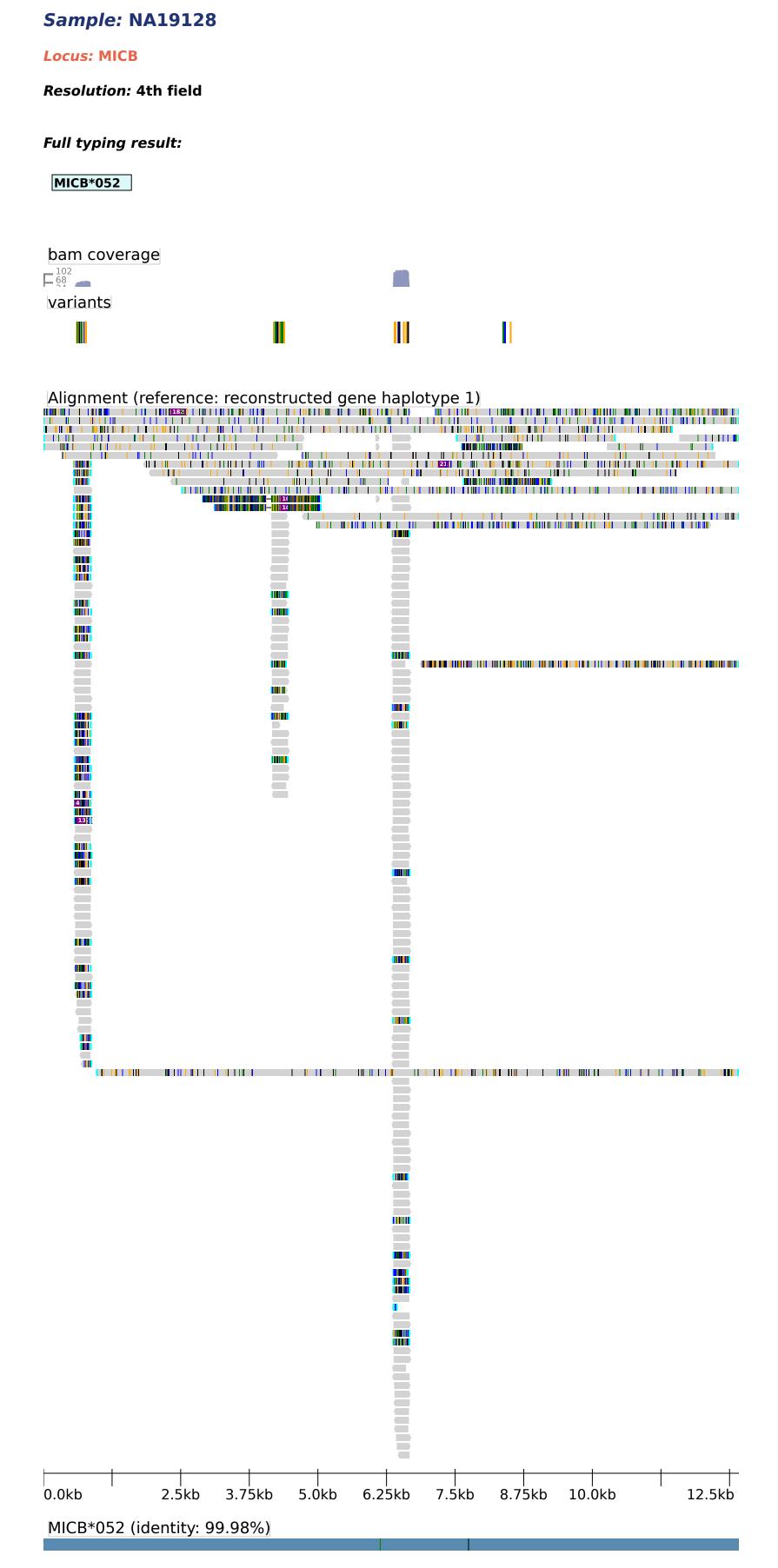
15.0kb

MICA*008:13 (identity: 84.77%)

2.5kb

5.0kb

0.0kb



Locus: TAP1

Resolution: 4th field

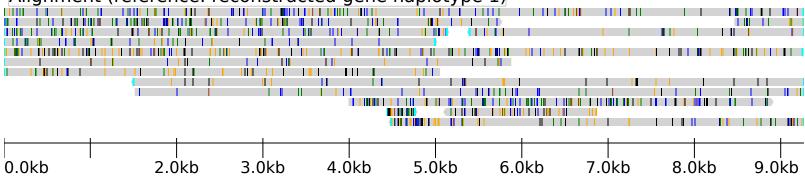
Full typing result:

TAP1*01:01:01:01

bam coverage

variants

Alignment (reference: reconstructed gene haplotype 1)



TAP1*01:01:01:01 (identity: 99.96%)

Locus: TAP1

Resolution: 4th field

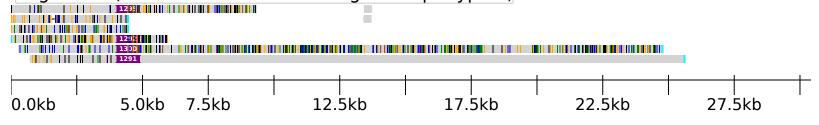
Full typing result:







Alignment (reference: reconstructed gene haplotype 2)



TAP1*01:01:01:04 (identity: 83.76%)

1305

TAP1*01:01:01:05 (identity: 83.77%)

13()5

TAP1*01:01:01:02 (identity: 83.76%)

1305

TAP1*01:01:01:01 (identity: 83.76%)

1303

TAP1*06:01 (identity: 83.75%)

13.3

Locus: TAP2

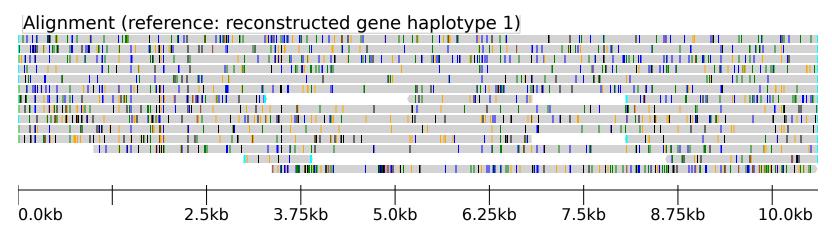
Resolution: 4th field

Full typing result:

TAP2*01:01:03:01

bam coverage





TAP2*01:01:03:01 (identity: 99.93%)

Locus: TAP2

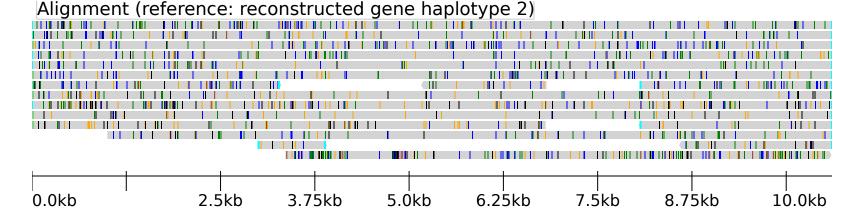
Resolution: 4th field

Full typing result:

TAP2*01:04:01:01 TAP2*01:01:03:02

bam coverage





TAP2*01:04:01:01 (identity: 99.76%)

TAP2*01:01:03:02 (identity: 99.82%)