Геномные браузеры

UCSC & IGV

Визуализация результатов NGS

ПО и данные:

IGV:

- http://software.broadinstitute.org/software/igv/download

Данные:

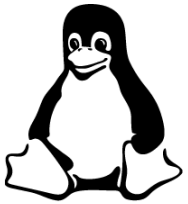
- https://is.gd/fyZMB8

IGV: Integrative Genomic Viewer

- http://software.broadinstitute.org/software/igv/download

Download -> Unzip

- Java 8 (java –version)
- igv.bat: –Xmx4g >> -Xmx1000m



- $ sudo apt-get install igv

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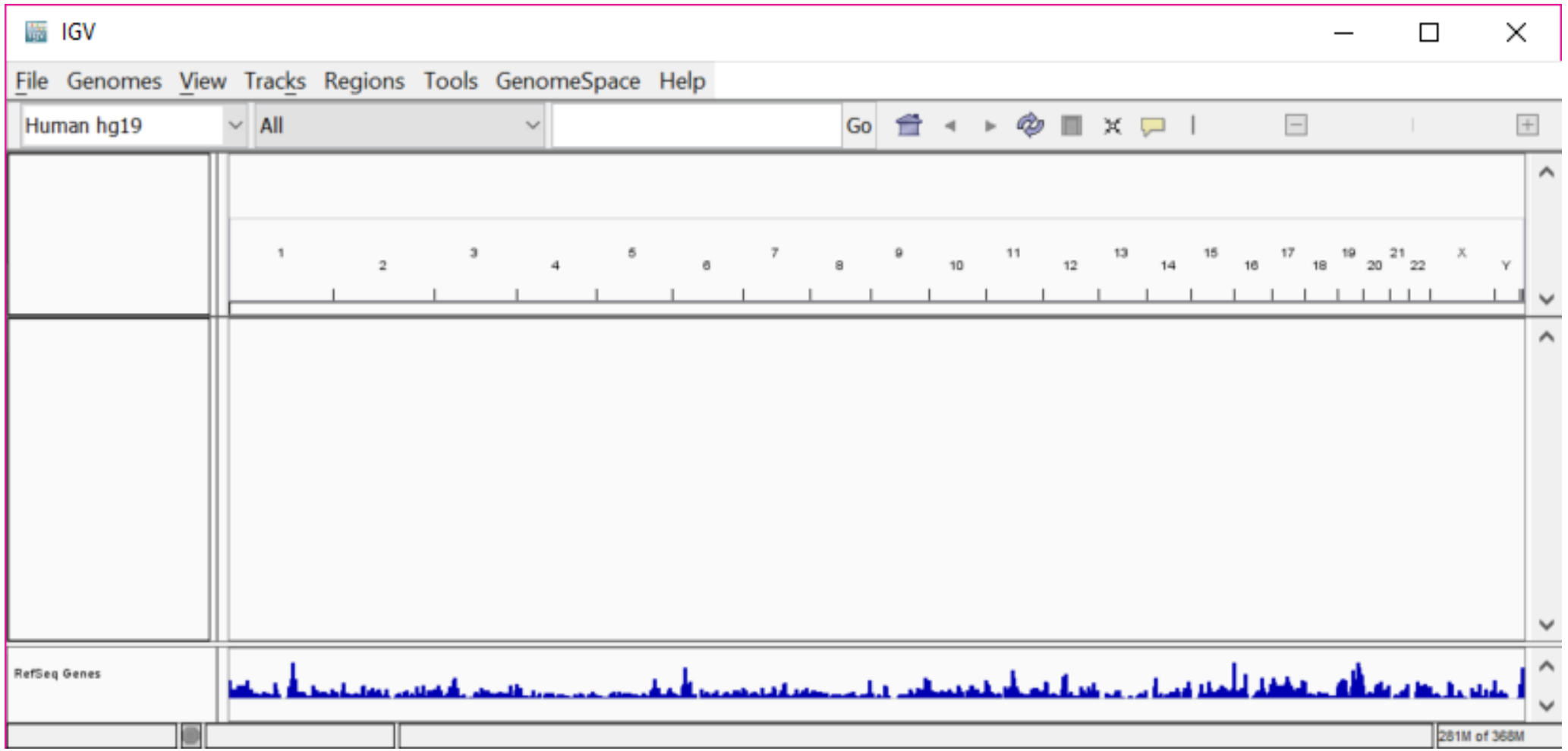

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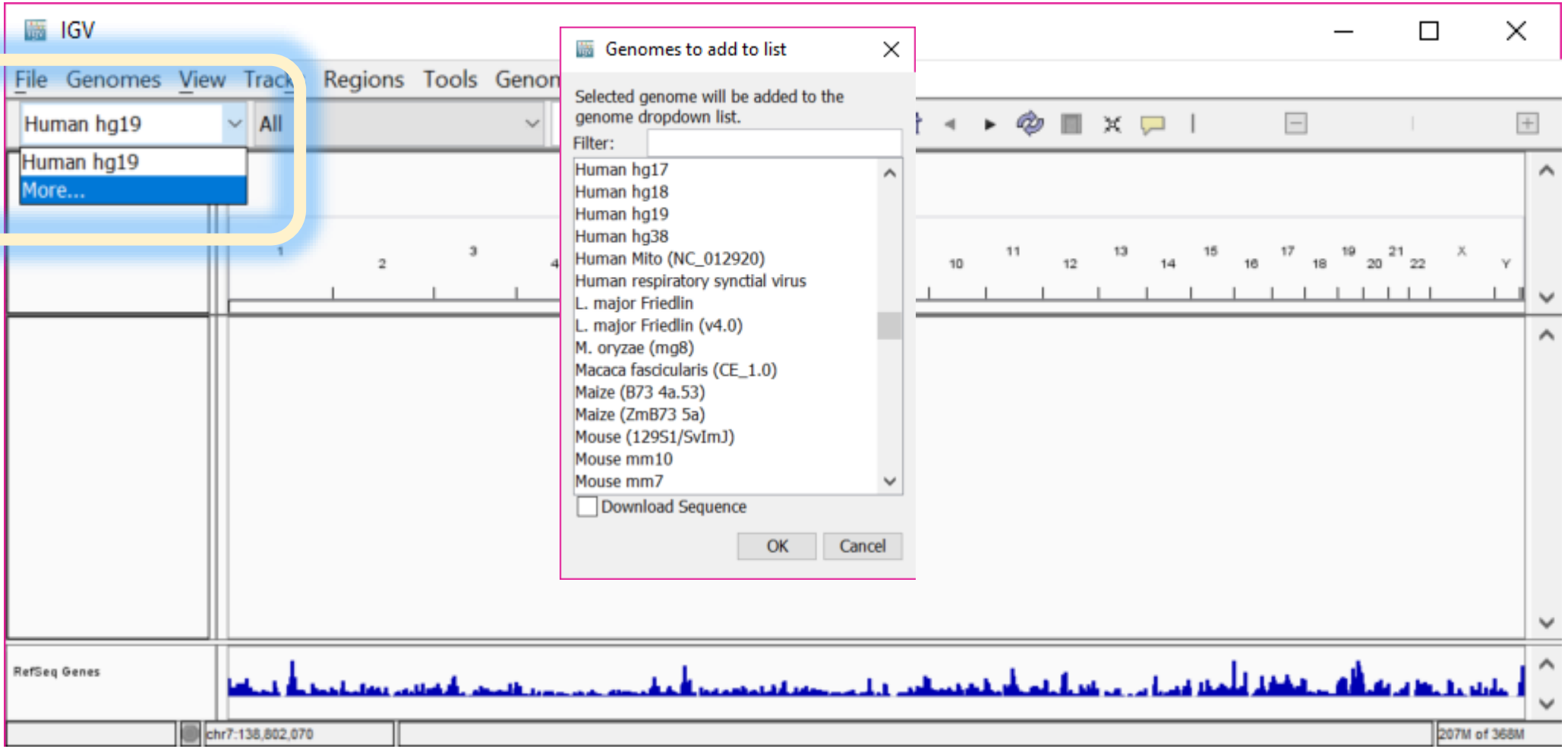

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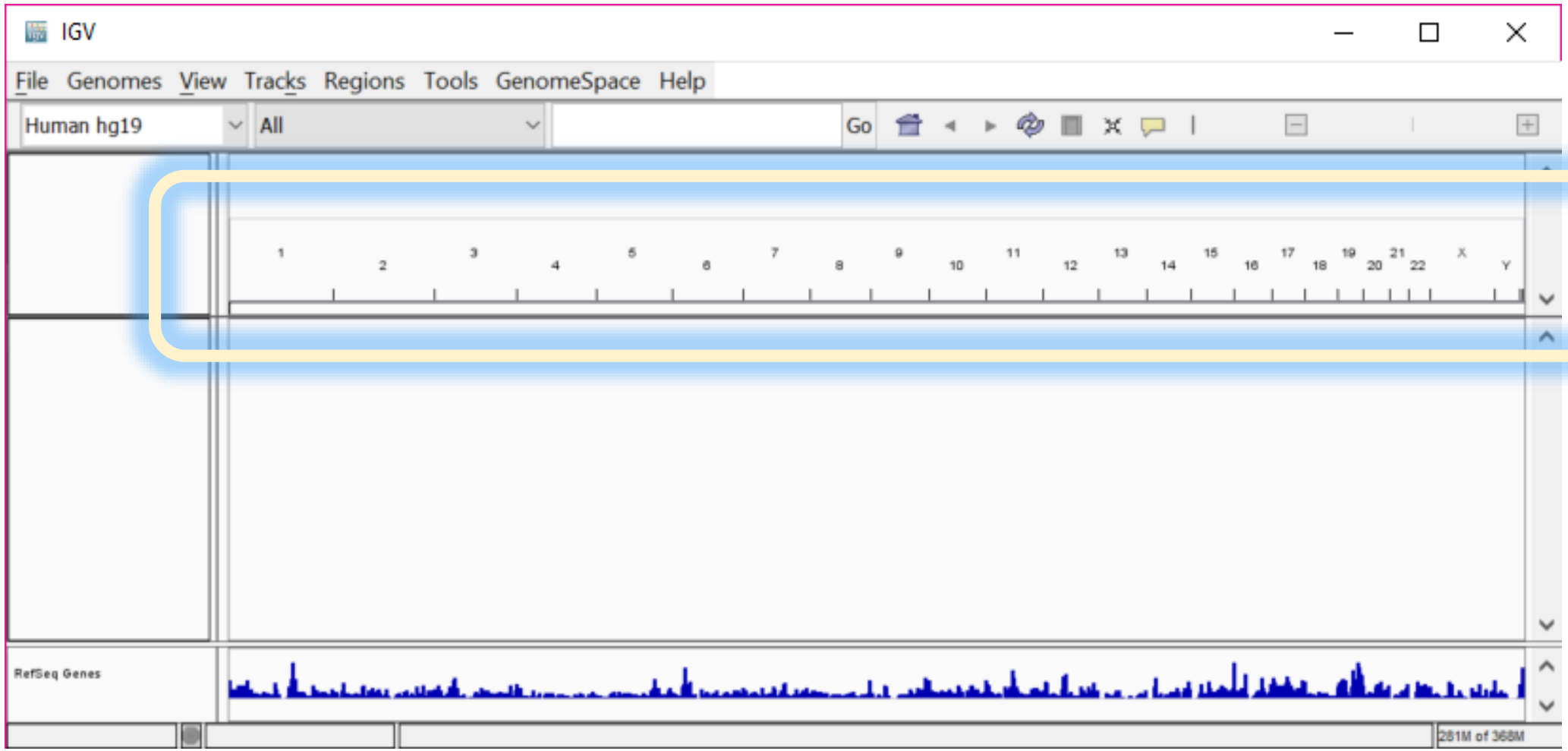

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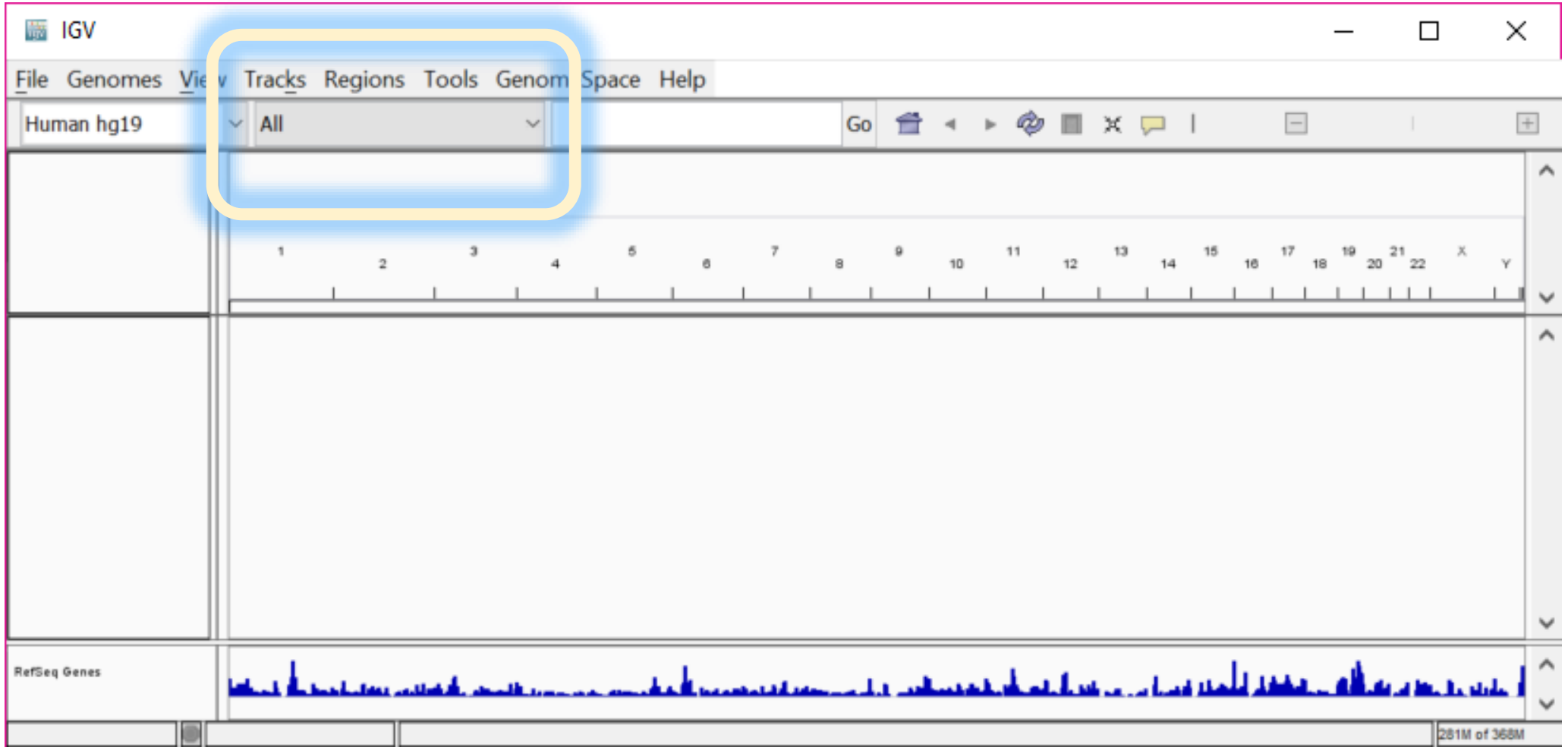

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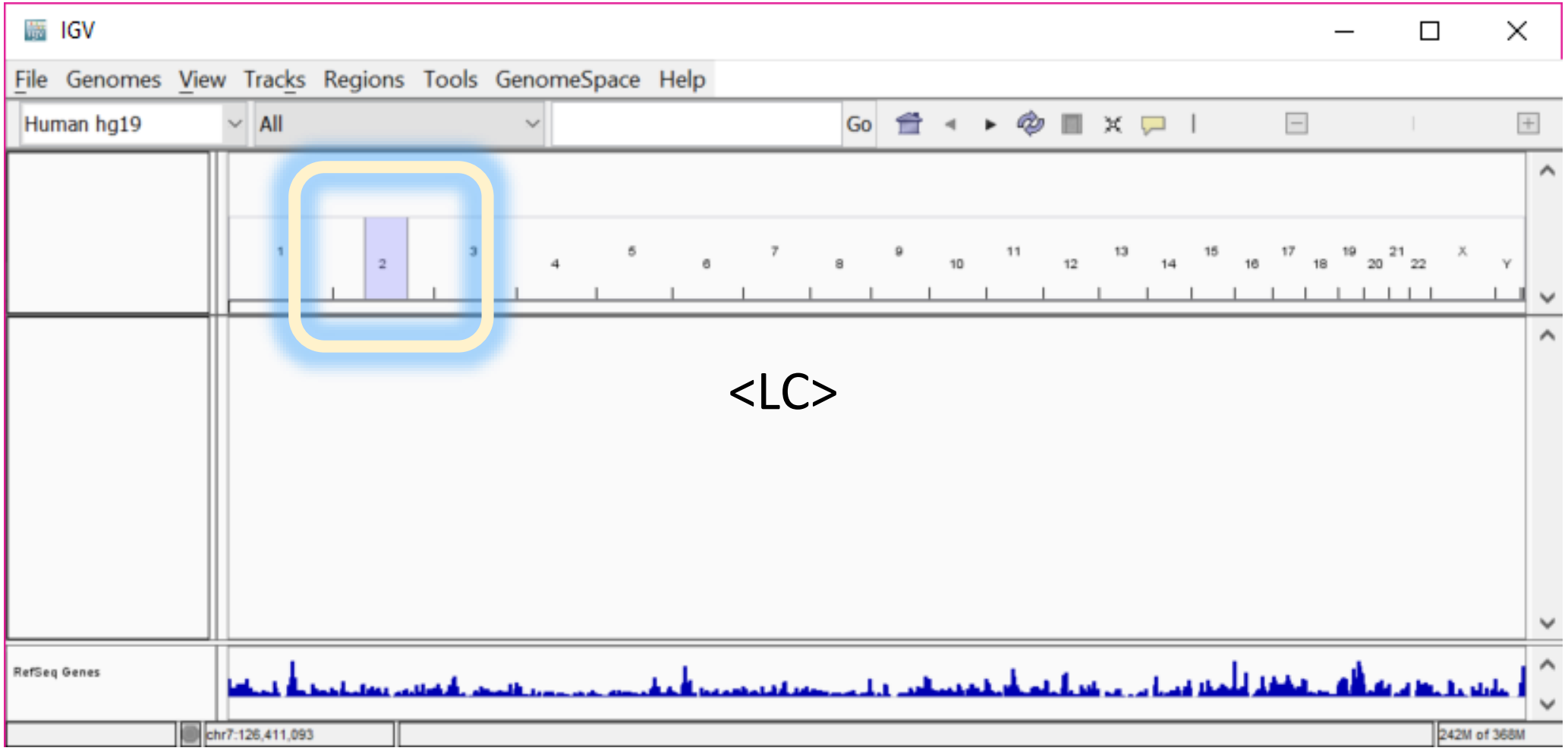

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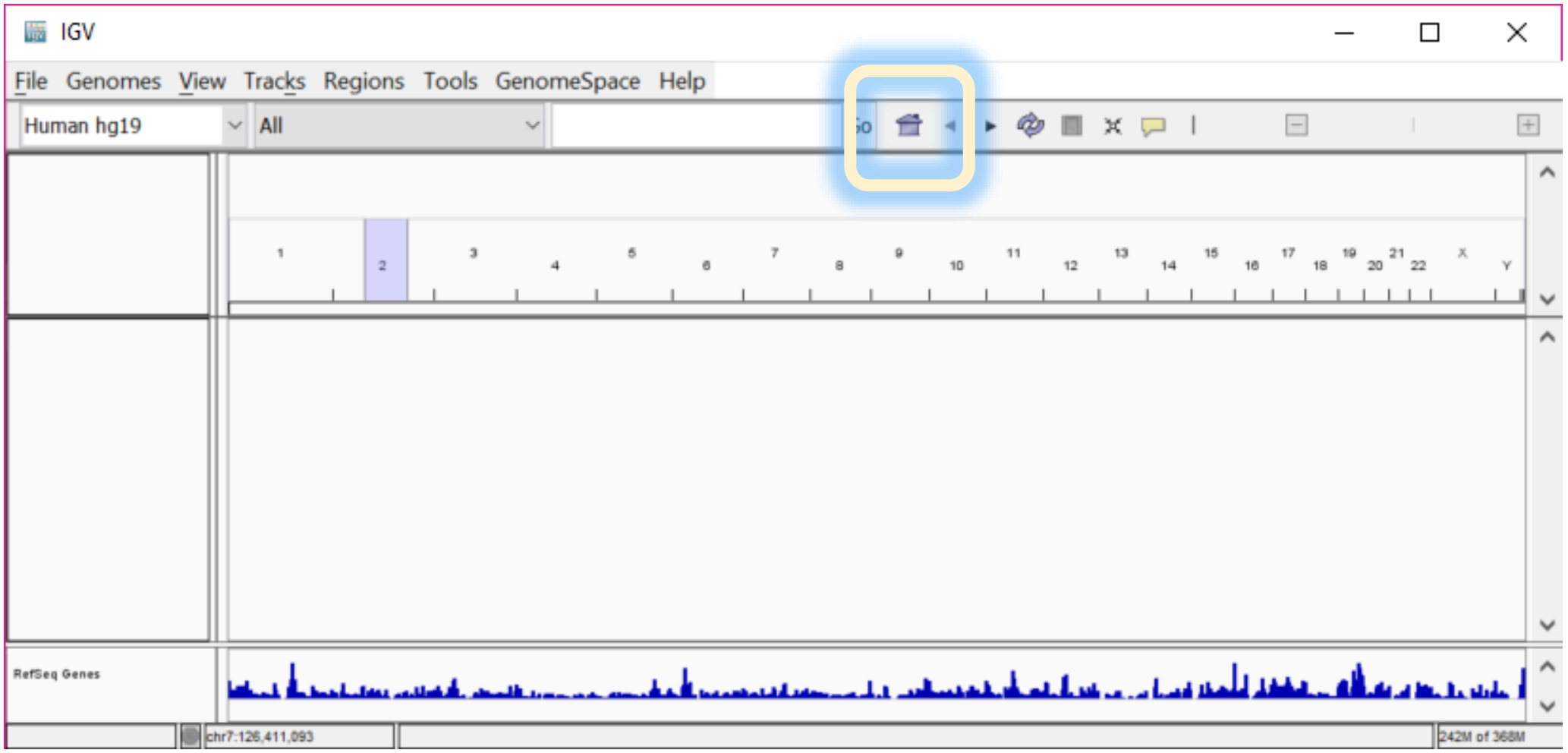

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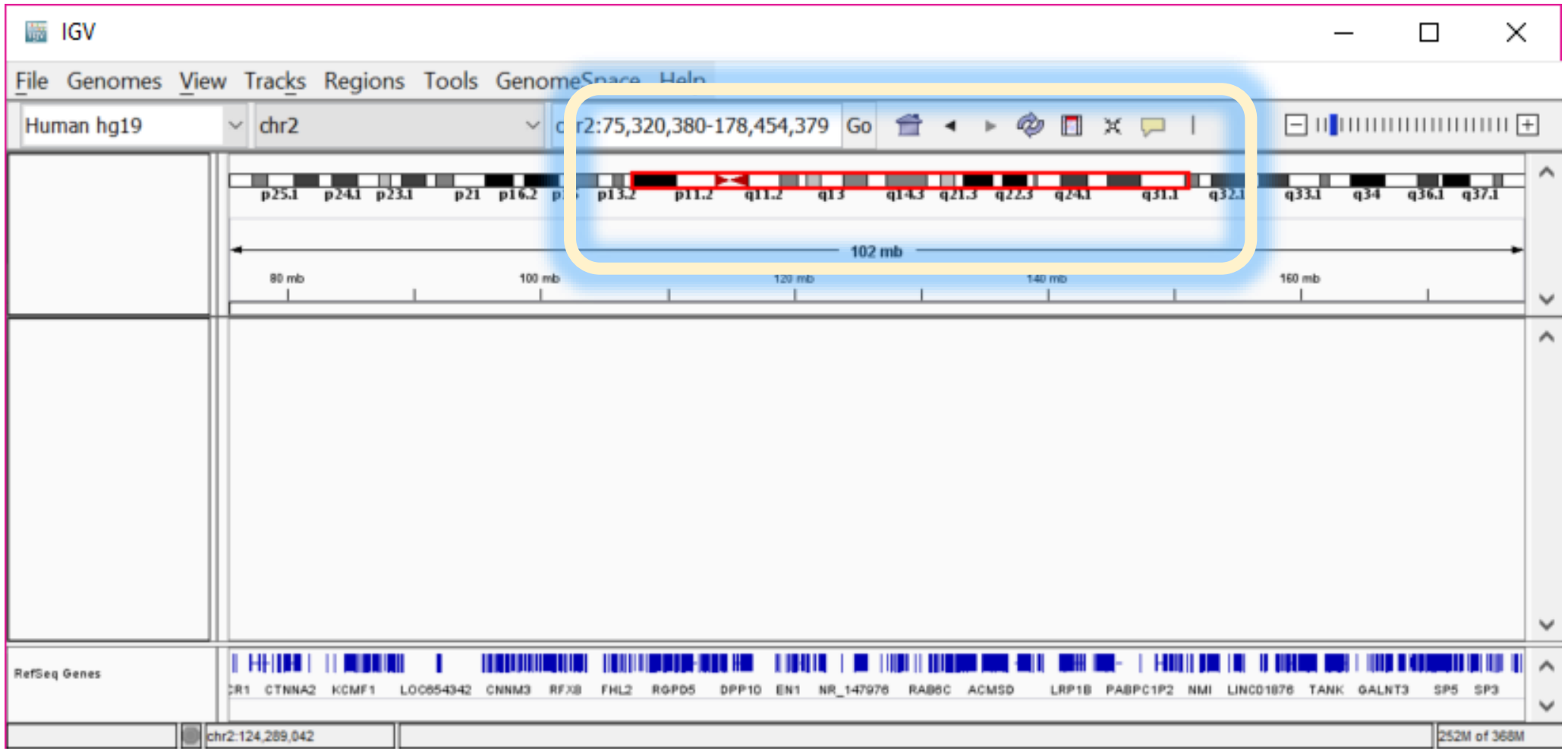

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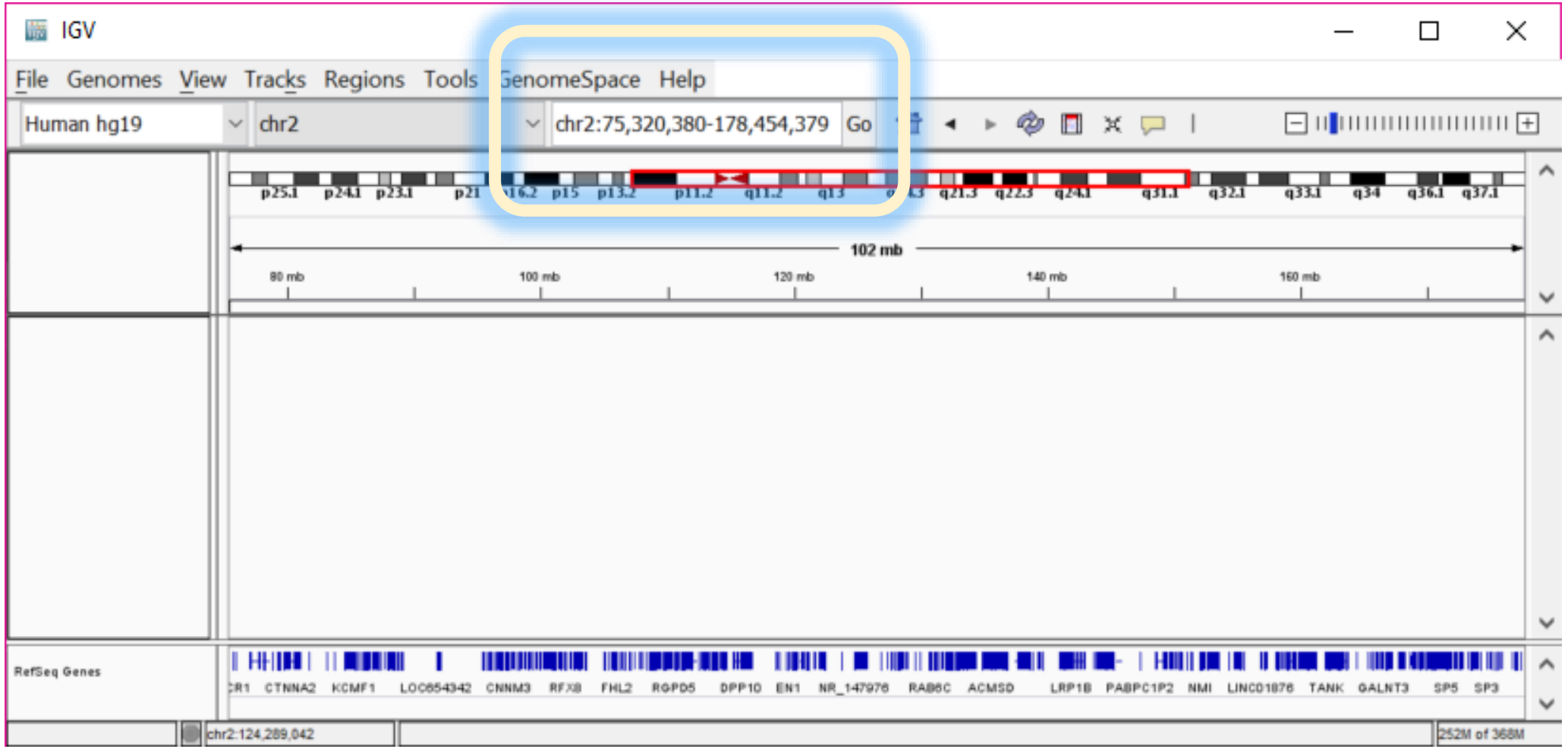

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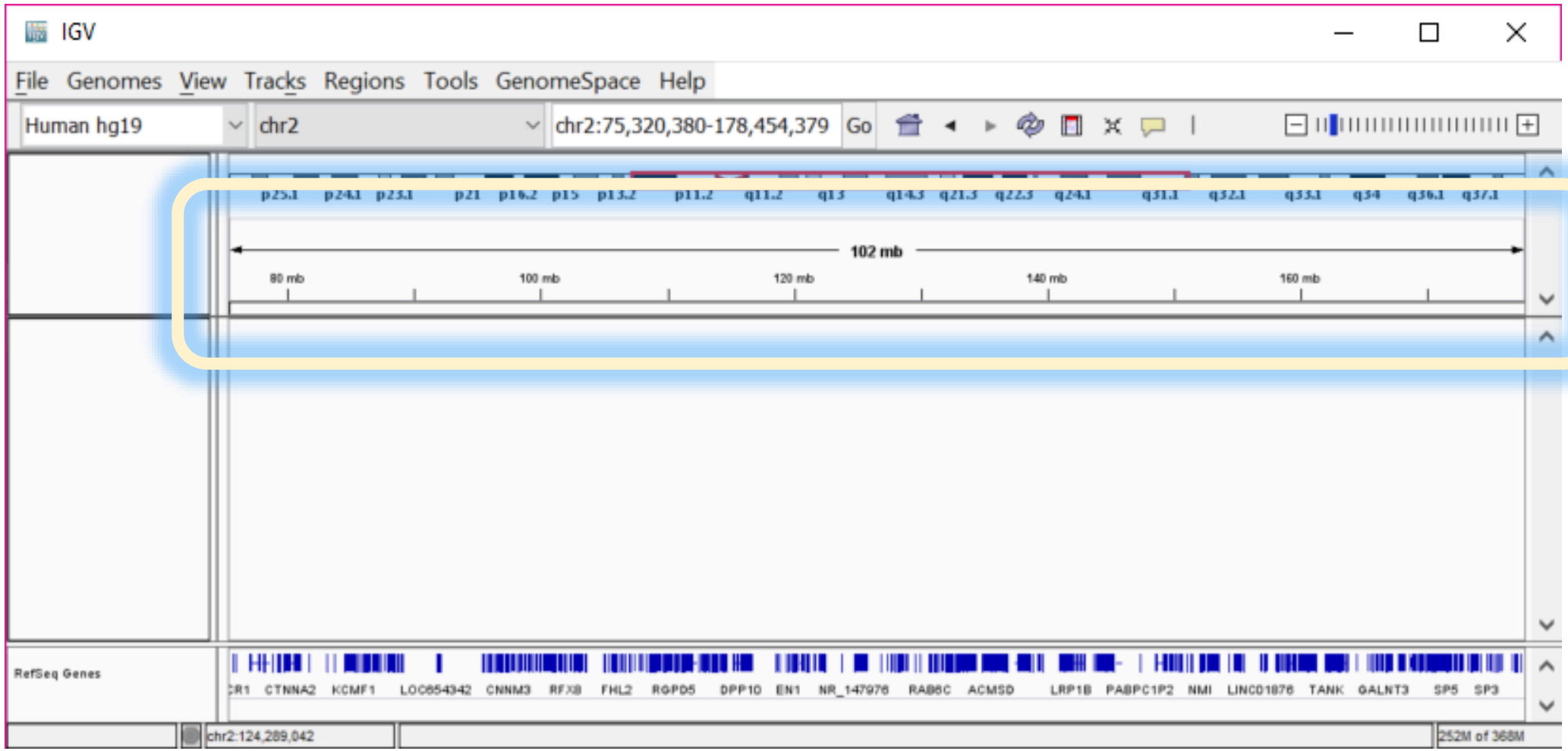

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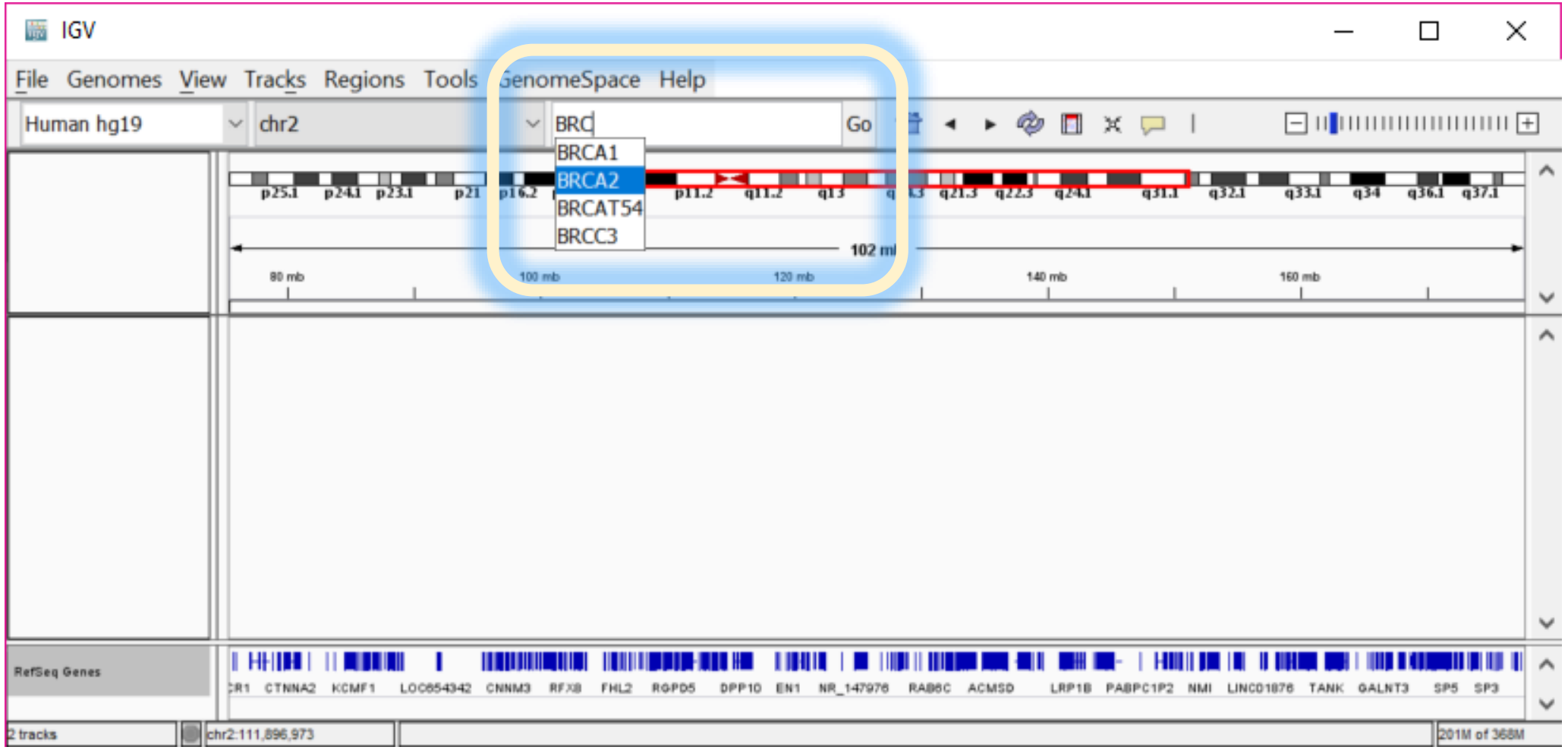

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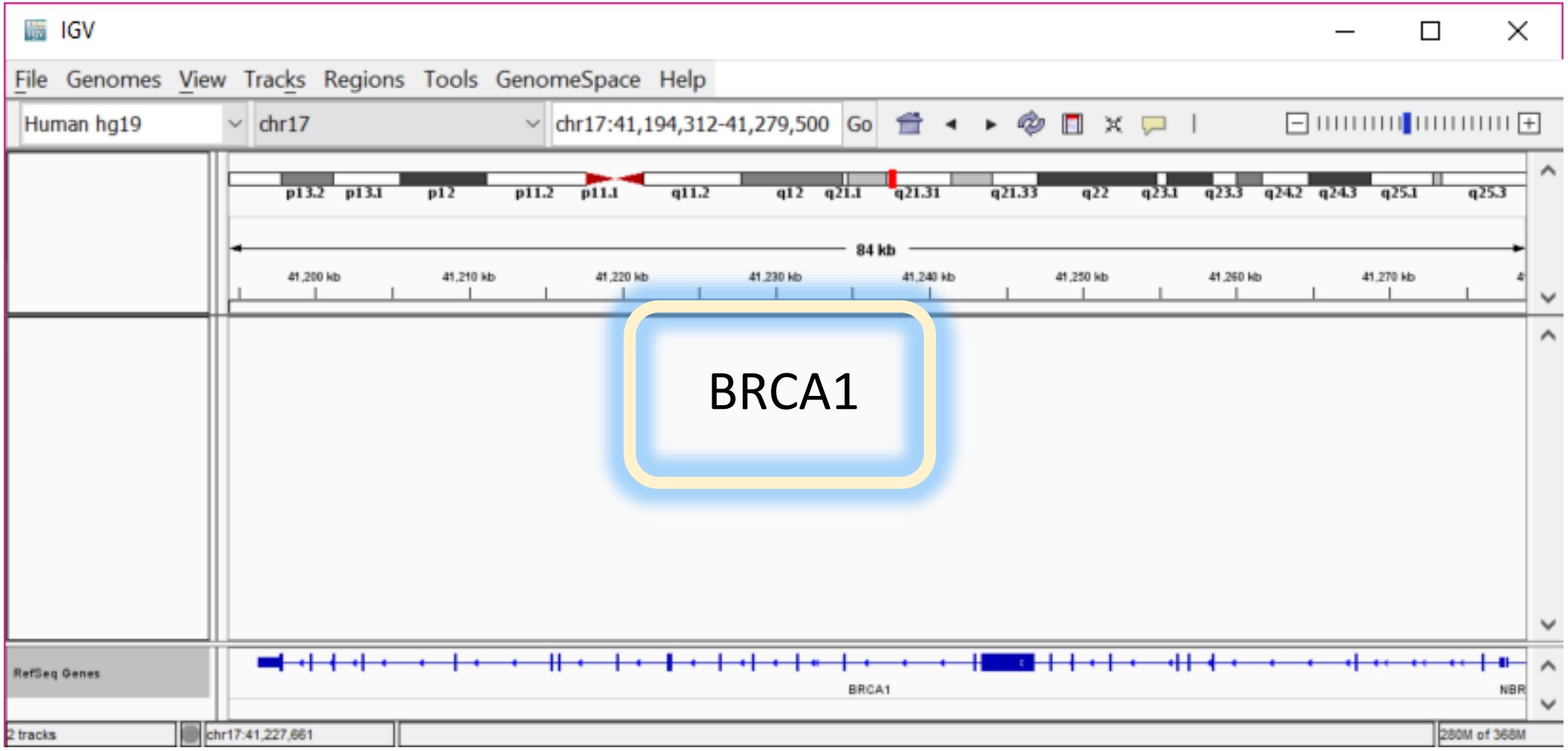

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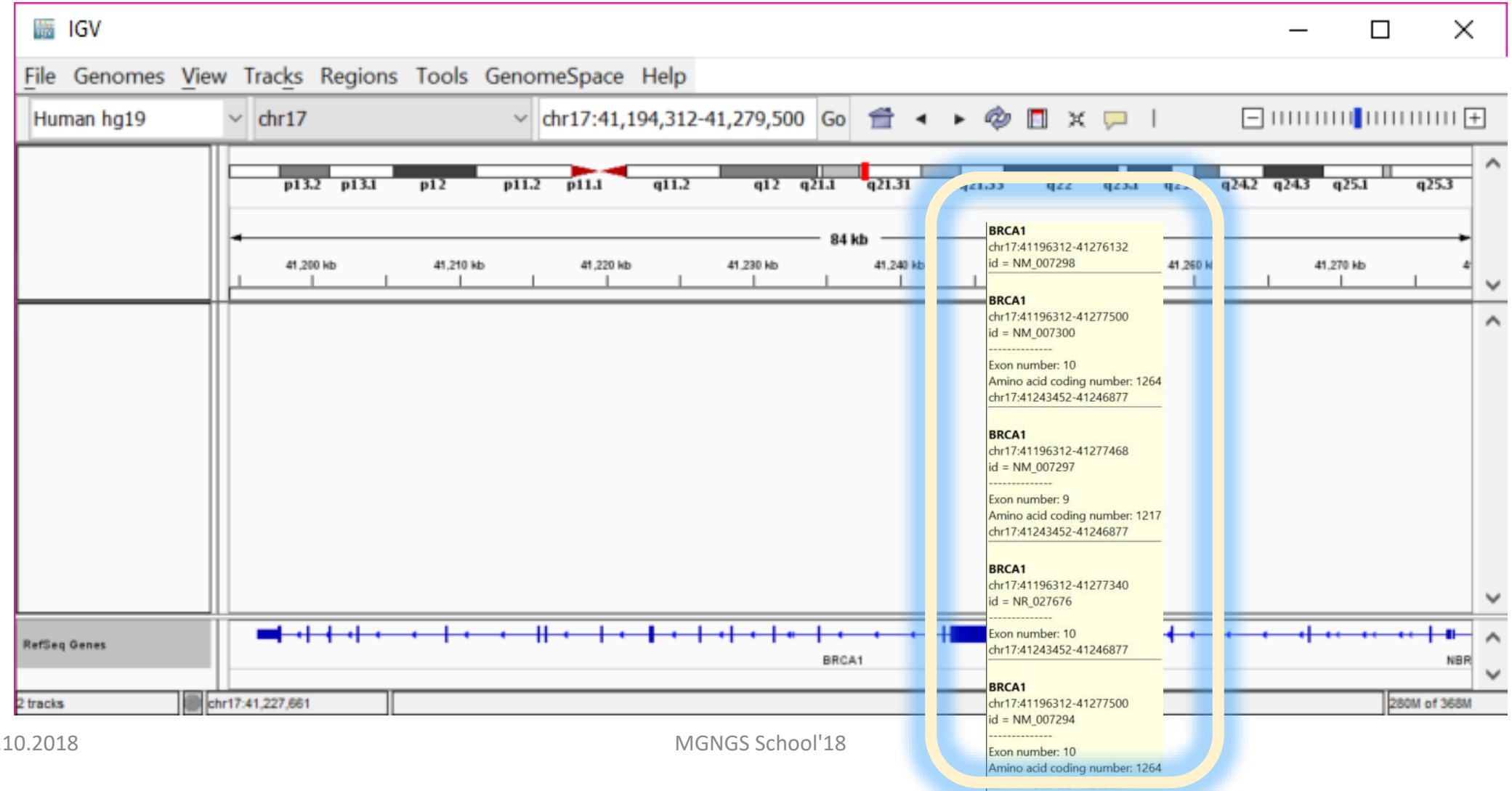

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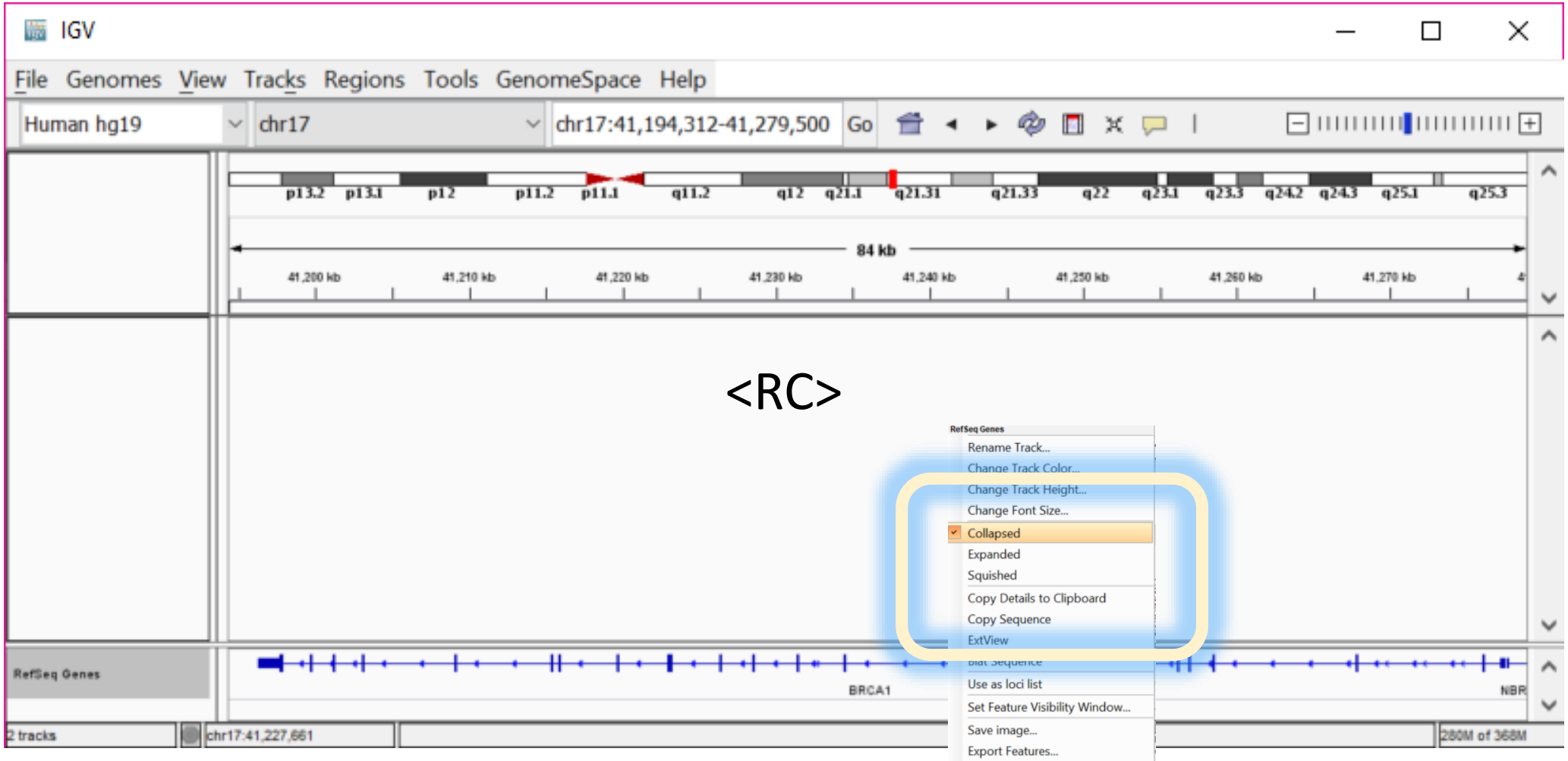

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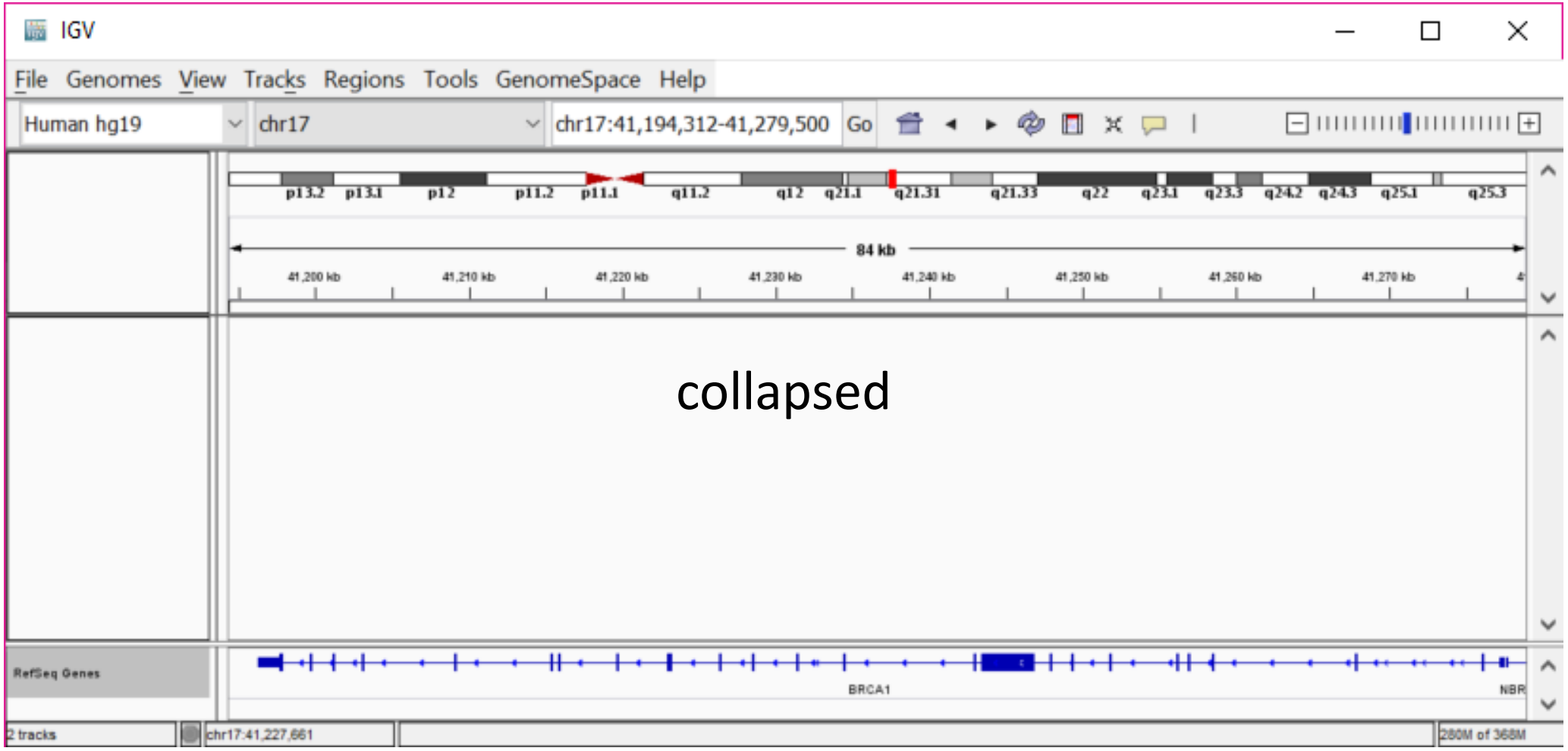

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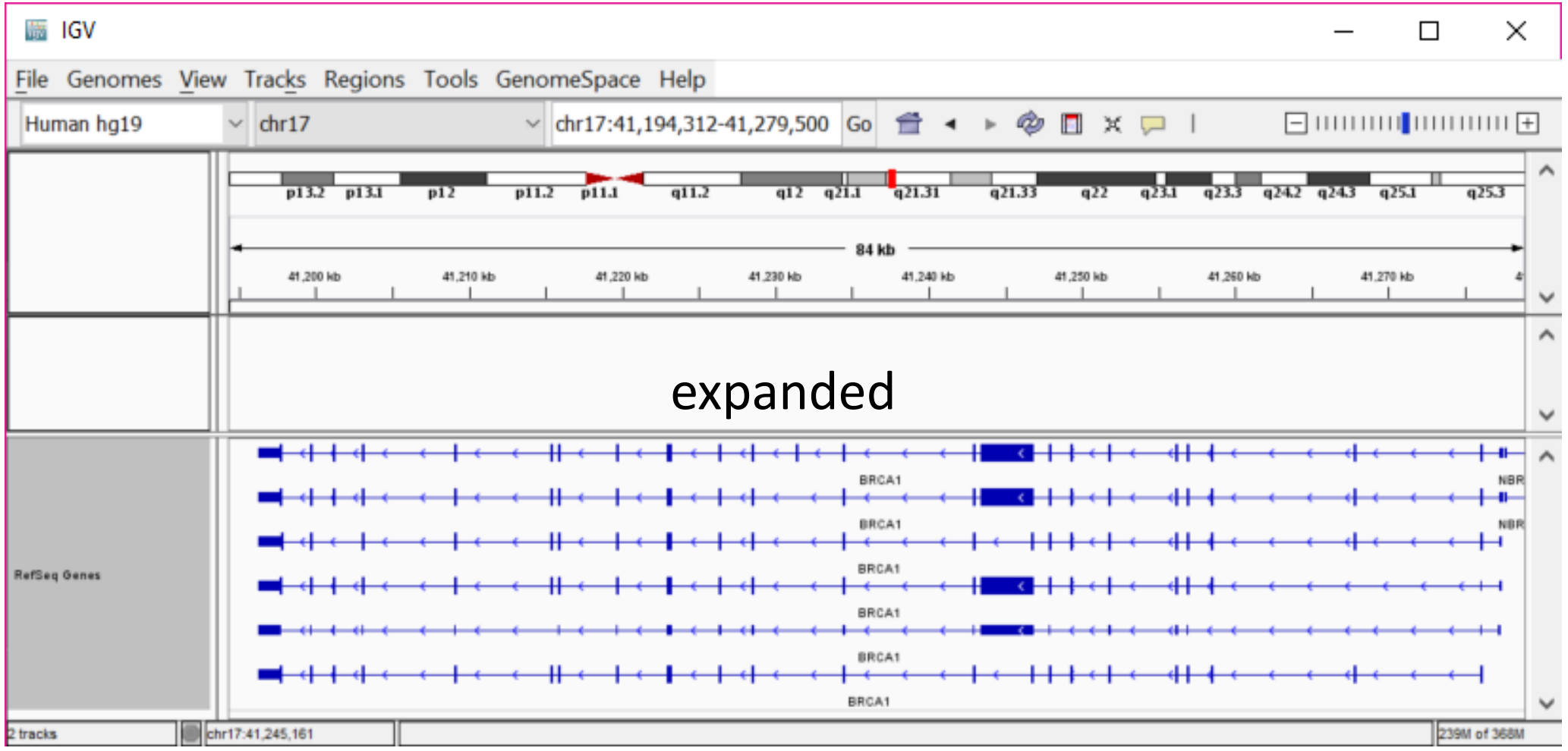

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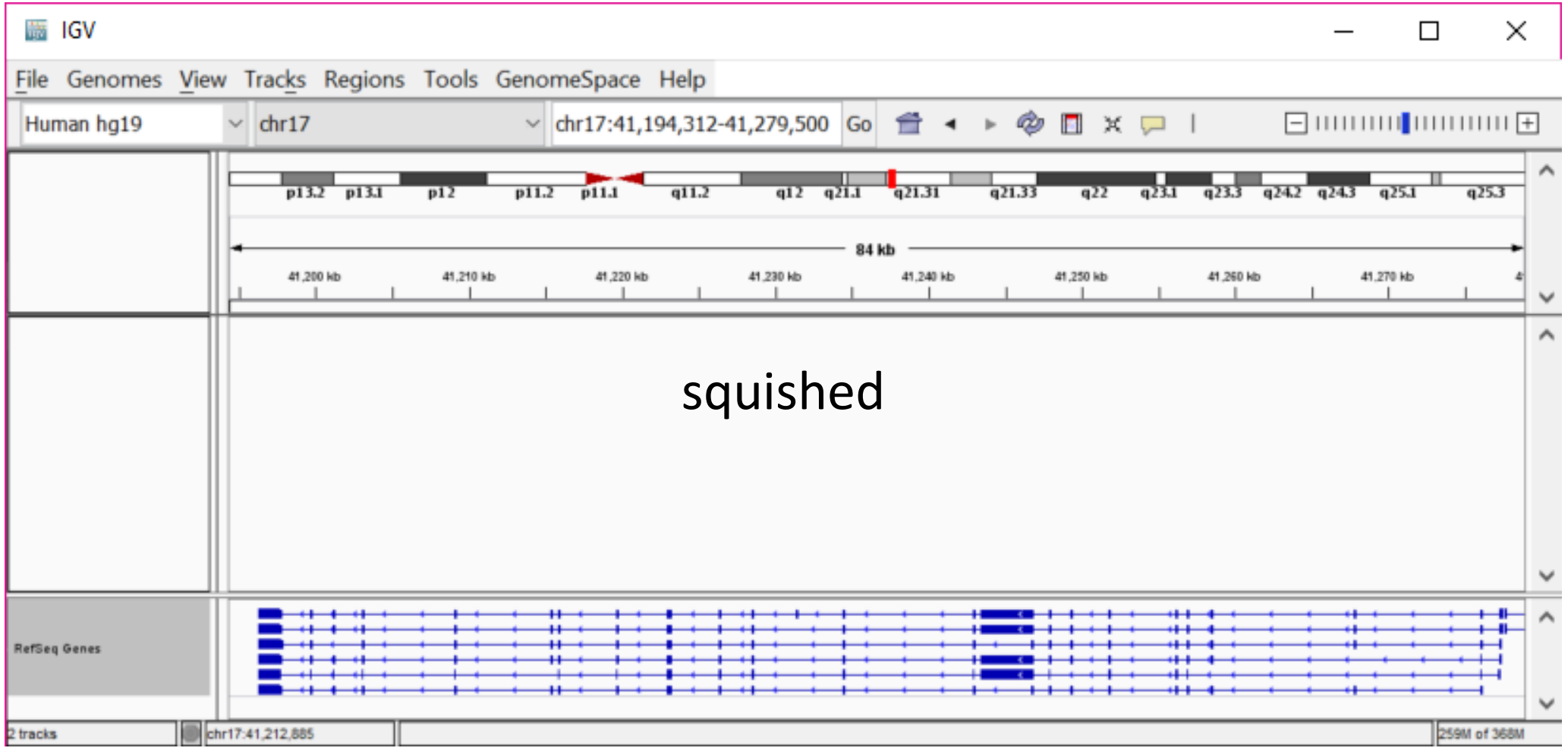
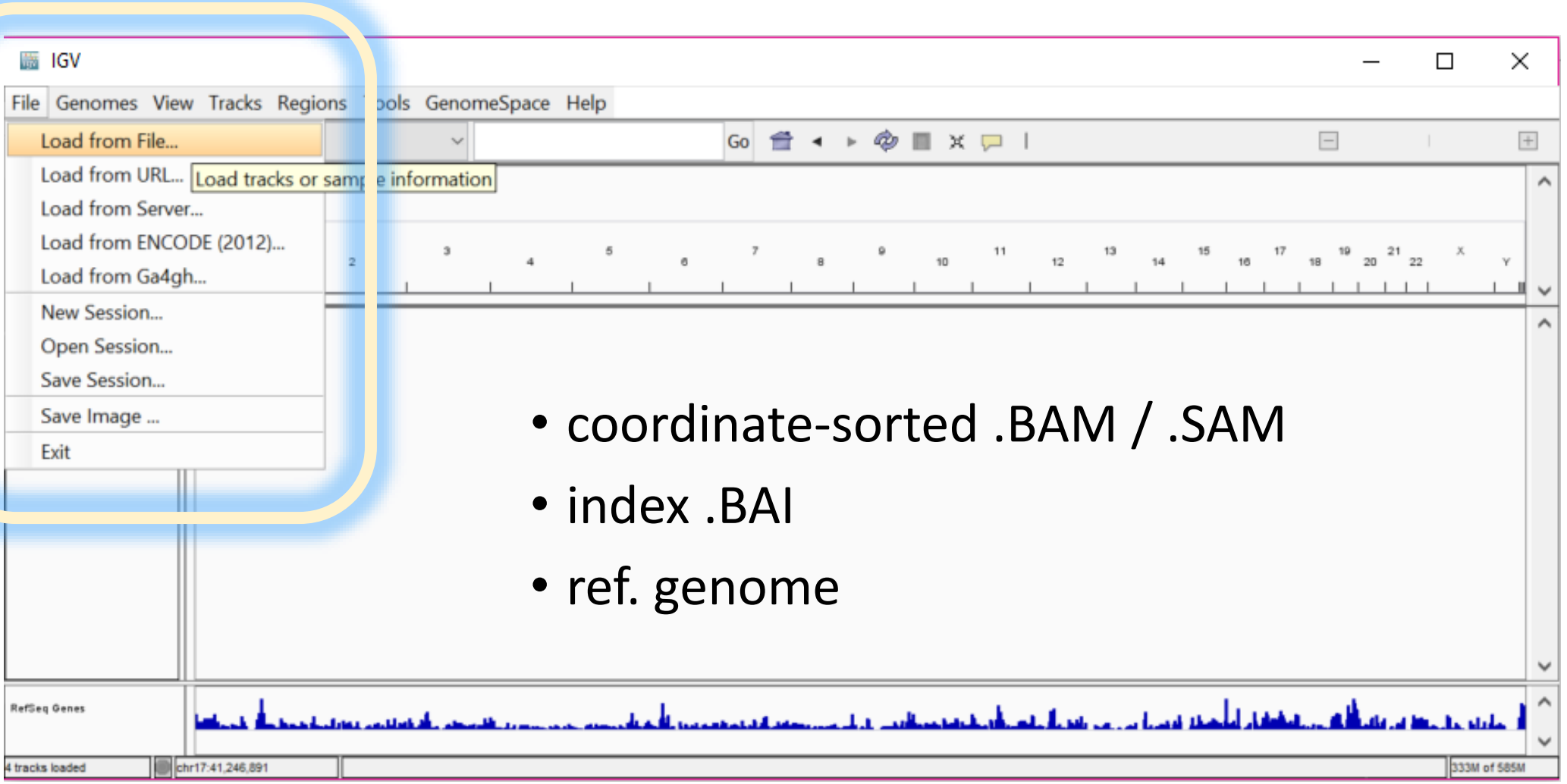


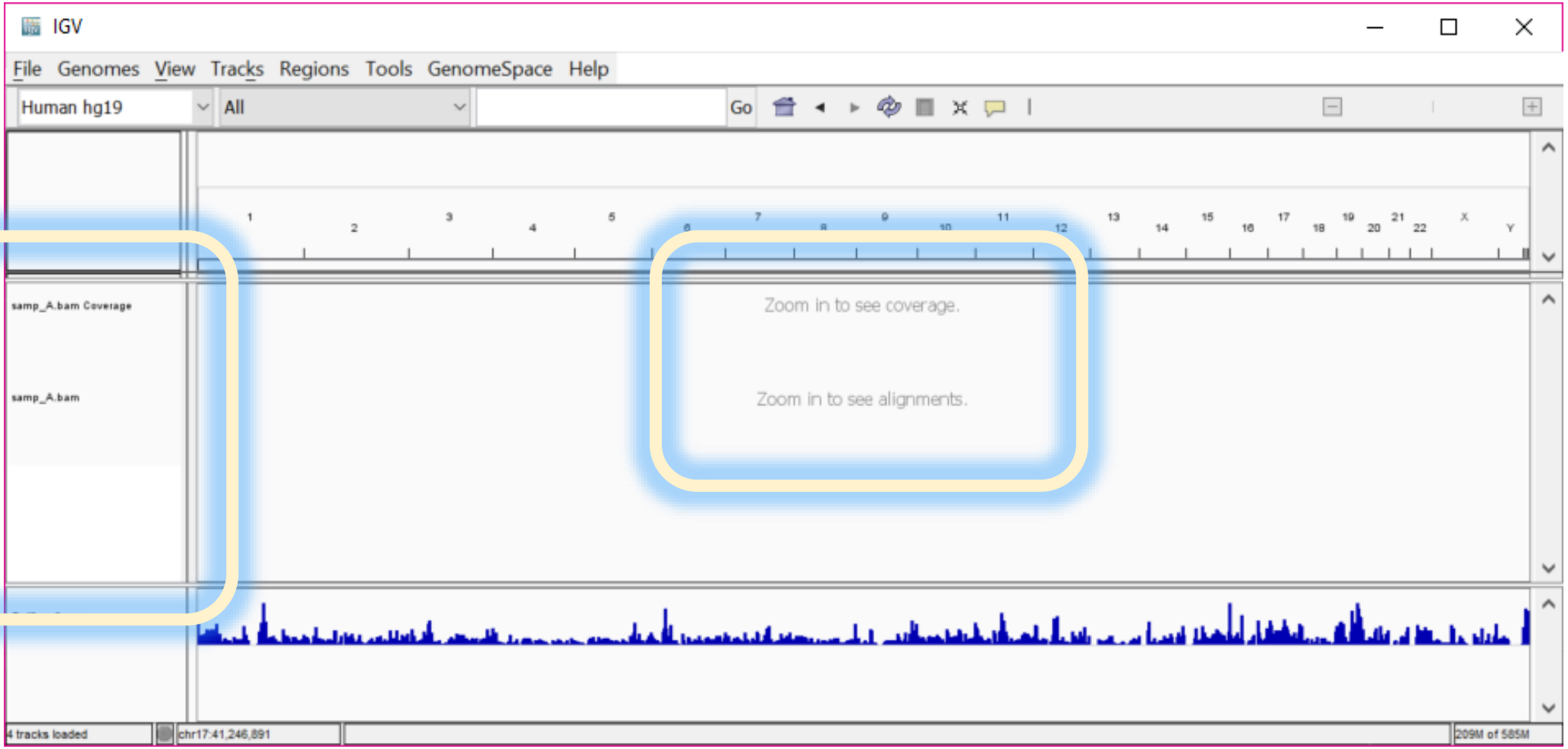
IGV: интерфейс

IGV: samp_A [open file]



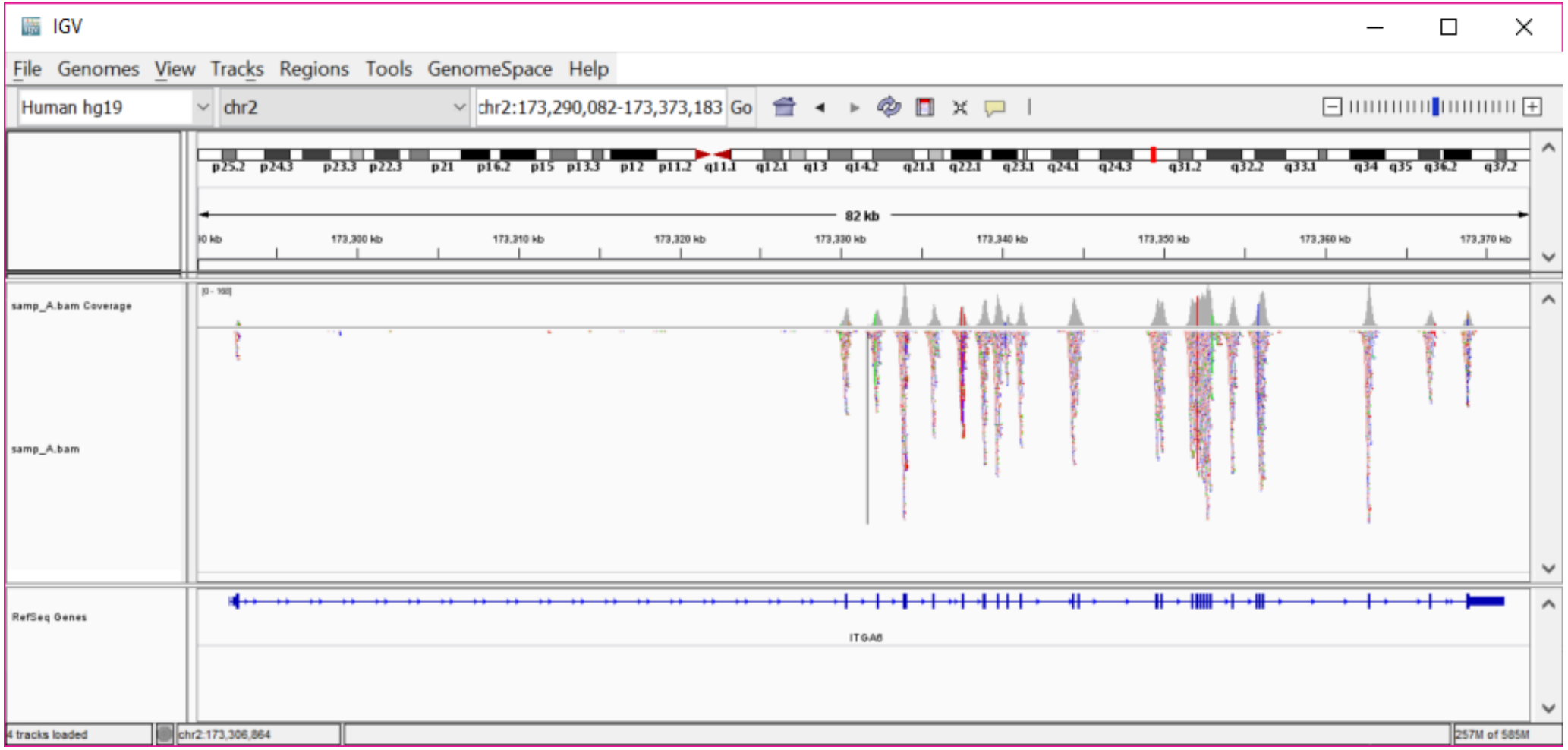
- coordinate-sorted .BAM / .SAM
- index .BAI
- ref. genome

IGV: samp_A

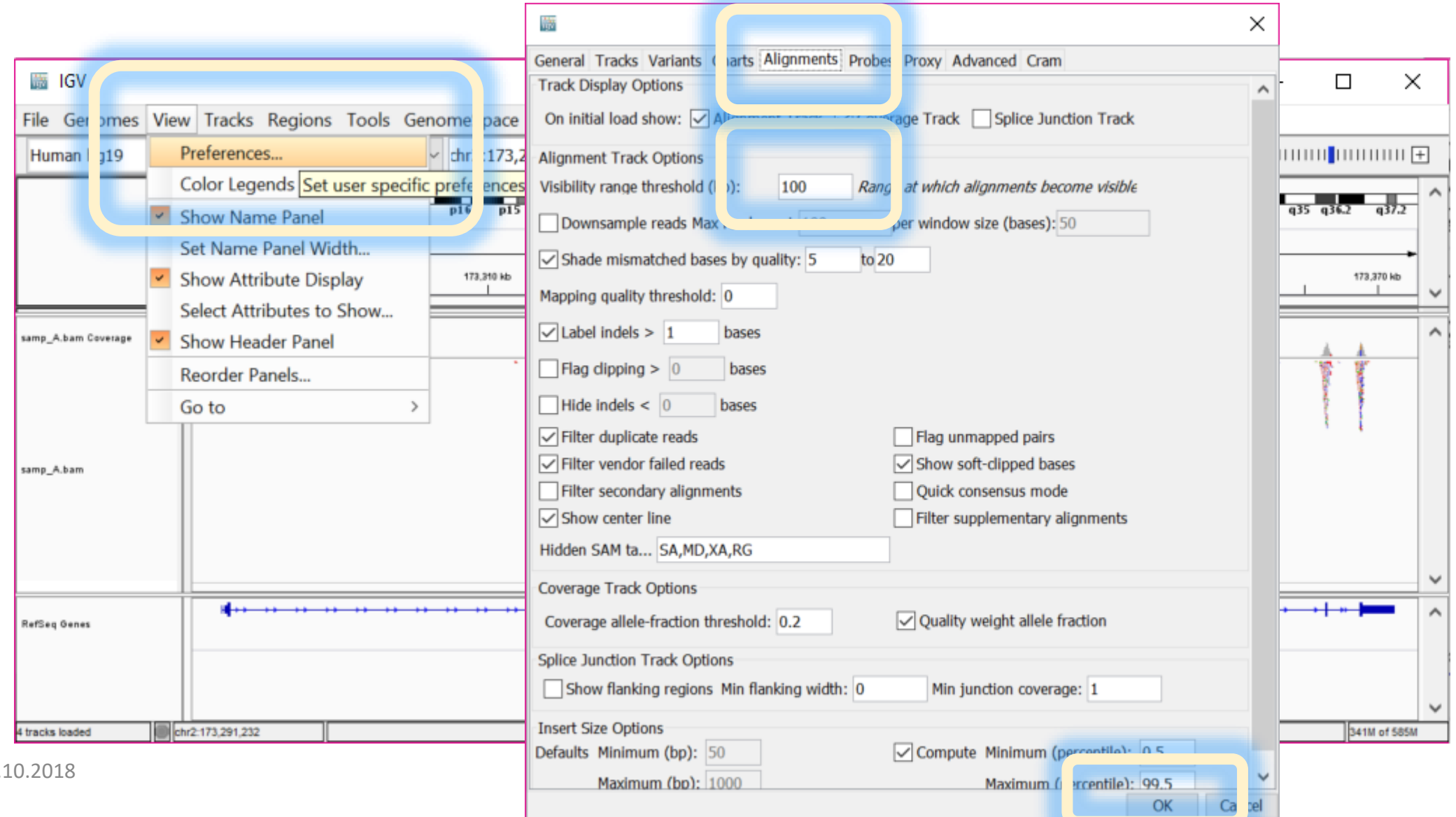

IGV
File Genomes View Tracks Regions Tools GenomeSpace Help
Human hg19
All
Go
samp_A.bam Coverage
samp_A.bam
Zoom in to see coverage.
Zoom in to see alignments.
4 tracks loaded
chr17:41,246,891
209M of 585M

IGV: samp_A [go to ITGA6]

IGV: samp_A [go to ITGA6]



IGV: samp_A [visibility range 30 > 100]



IGV: samp_A [chr2:173337540 InsA]

1	Chr	Start	End	Ref	Alt	Func.refG	Gene.refG
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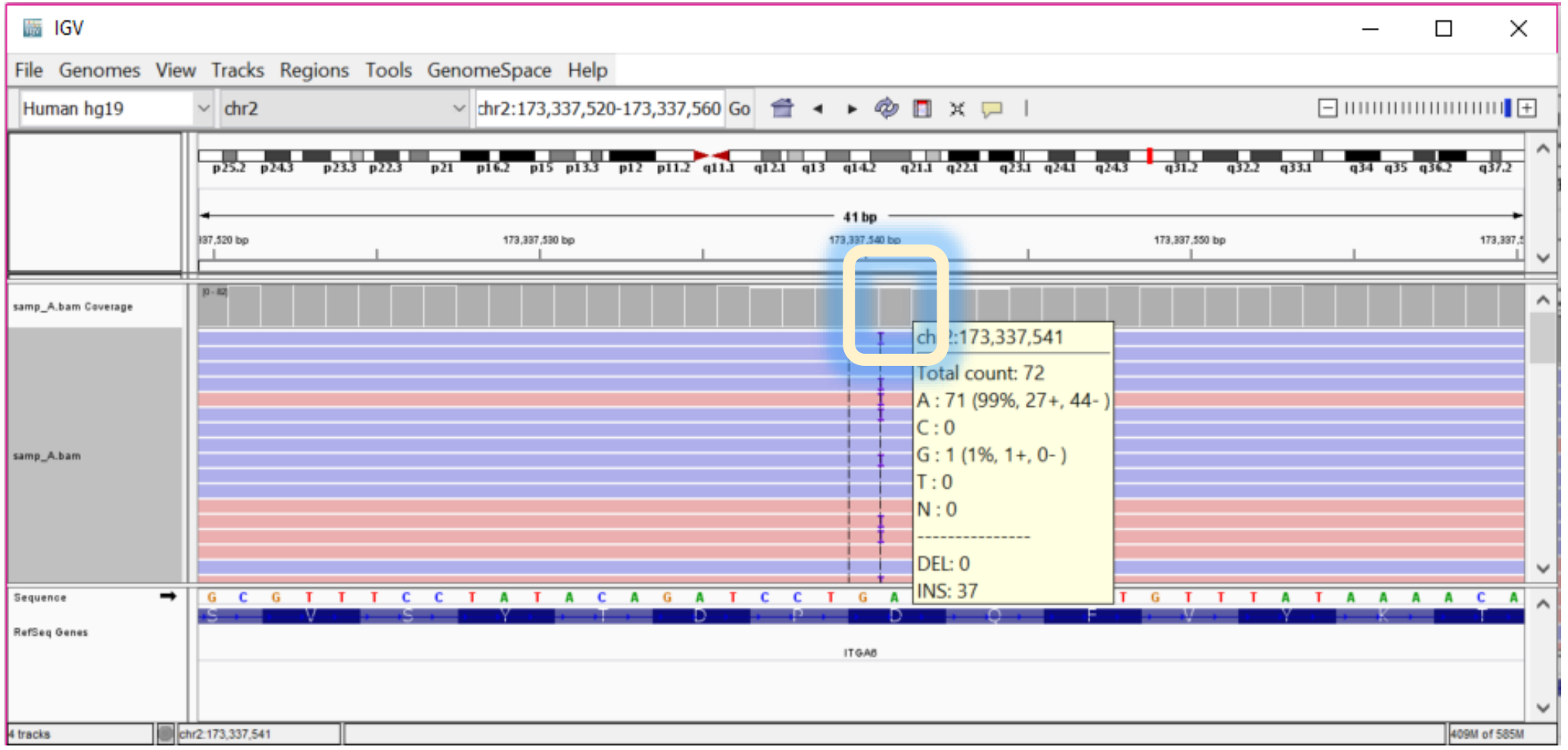
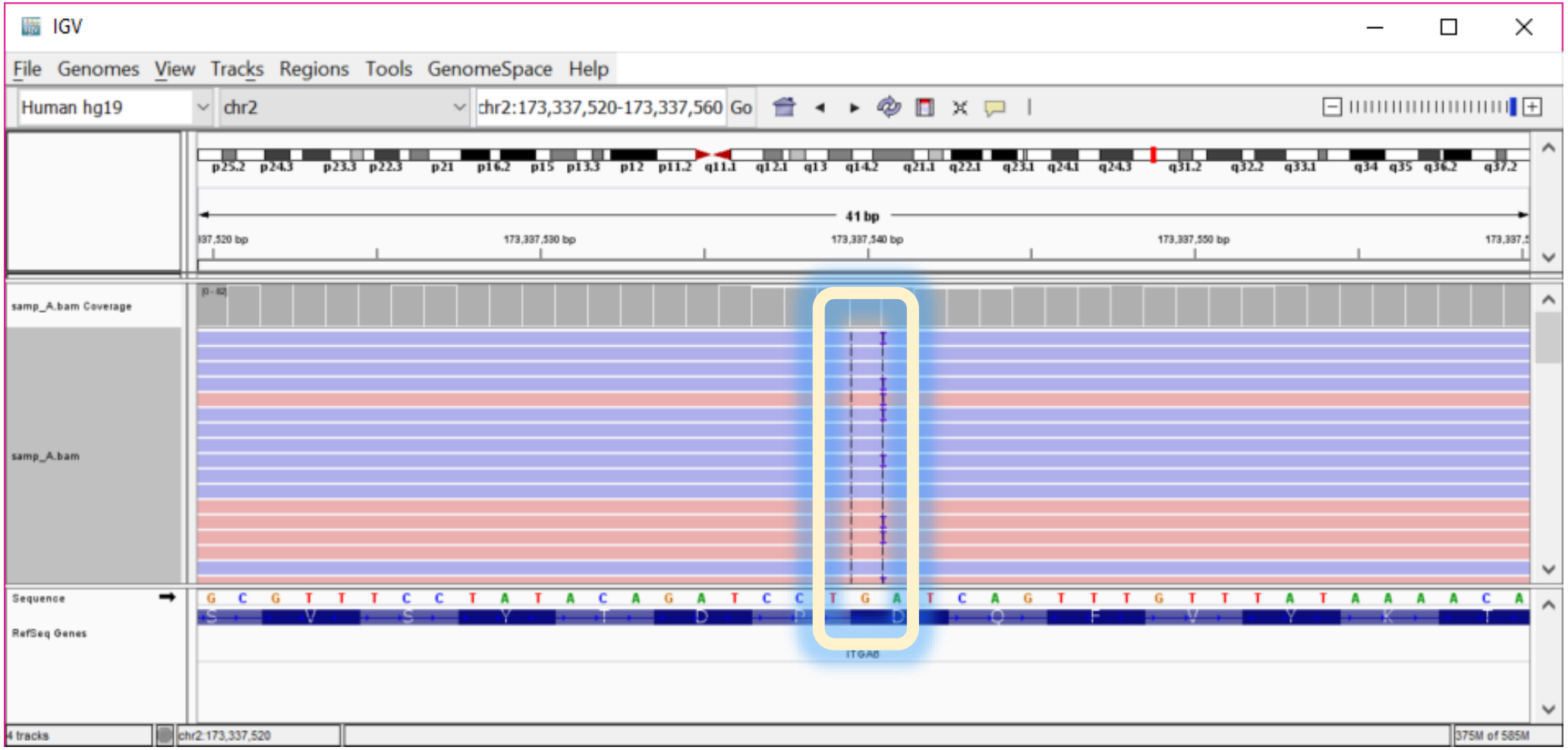
3	chr2	173292713	173292713	C	T	intronic	ITGA6
4	chr2	173330549	173330549	T	G	intronic	ITGA6
5	chr2	173332115	173332115	G	A	intronic	ITGA6
6	chr2	173334161	173334161	-	ATGATTTAGTACC	intronic	ITGA6
7	chr2	173337495	173337495	C	T	intronic	ITGA6
8	chr2	173337540	173337540	-	A	exonic	ITGA6
9	chr2	173337681	173337681	G	T	intronic	ITGA6
10	chr2	173340198	173340198	A	C	intronic	ITGA6
11	chr2	173352103	173352103	C	T	exonic	ITGA6
12	chr2	173353060	173353060	G	A	intronic	ITGA6
13	chr2	173353318	173353318	G	A	intronic	ITGA6
14	chr2	173355907	173355907	A	C	intronic	ITGA6
15	chr2	173368897	173368897	G	C	exonic	ITGA6

IGV: samp_A [chr2:173337540 InsA]

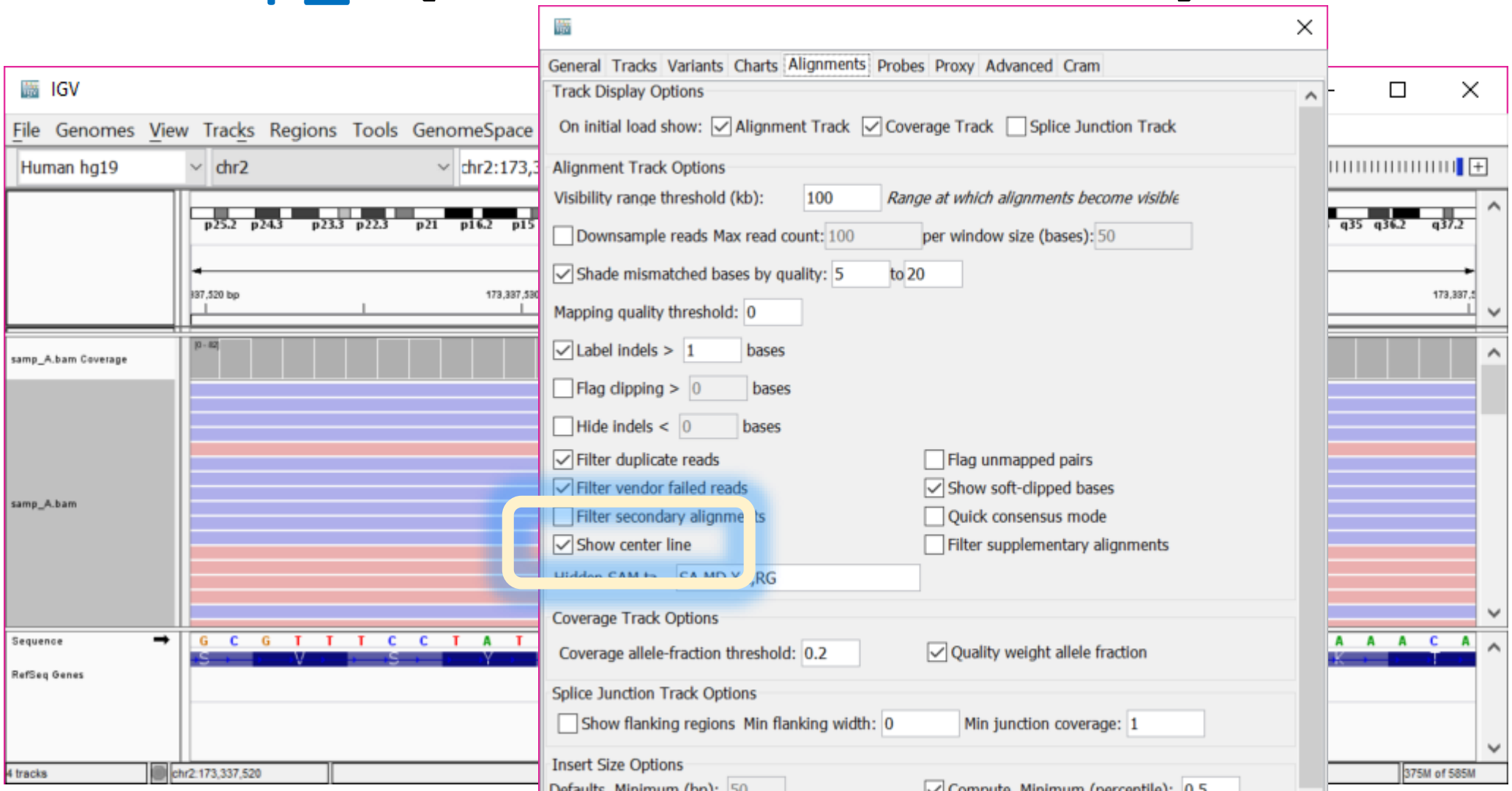
IGV: samp_A [chr2:173337540 InsA]



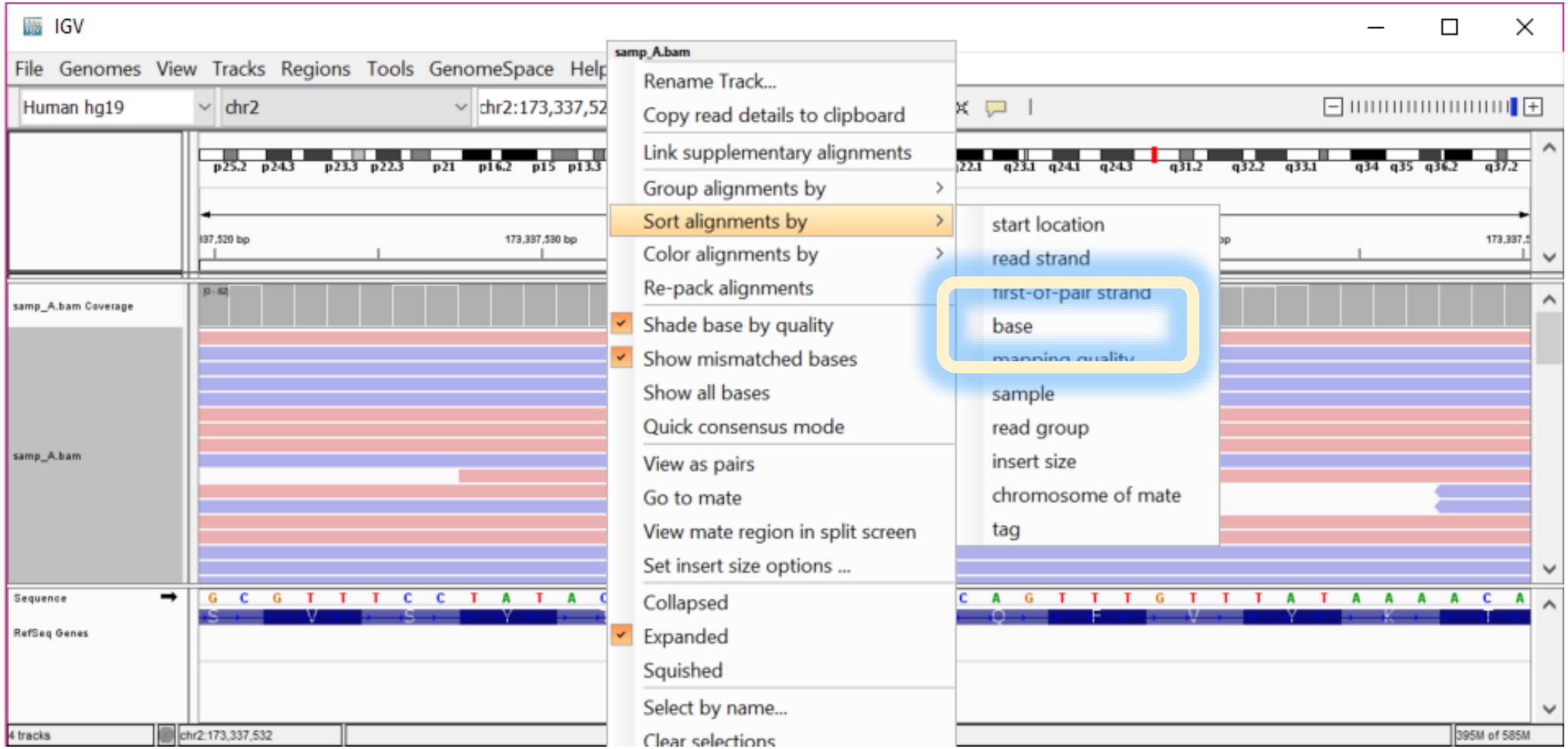
IGV: samp_A [chr2:173337540 InsA]



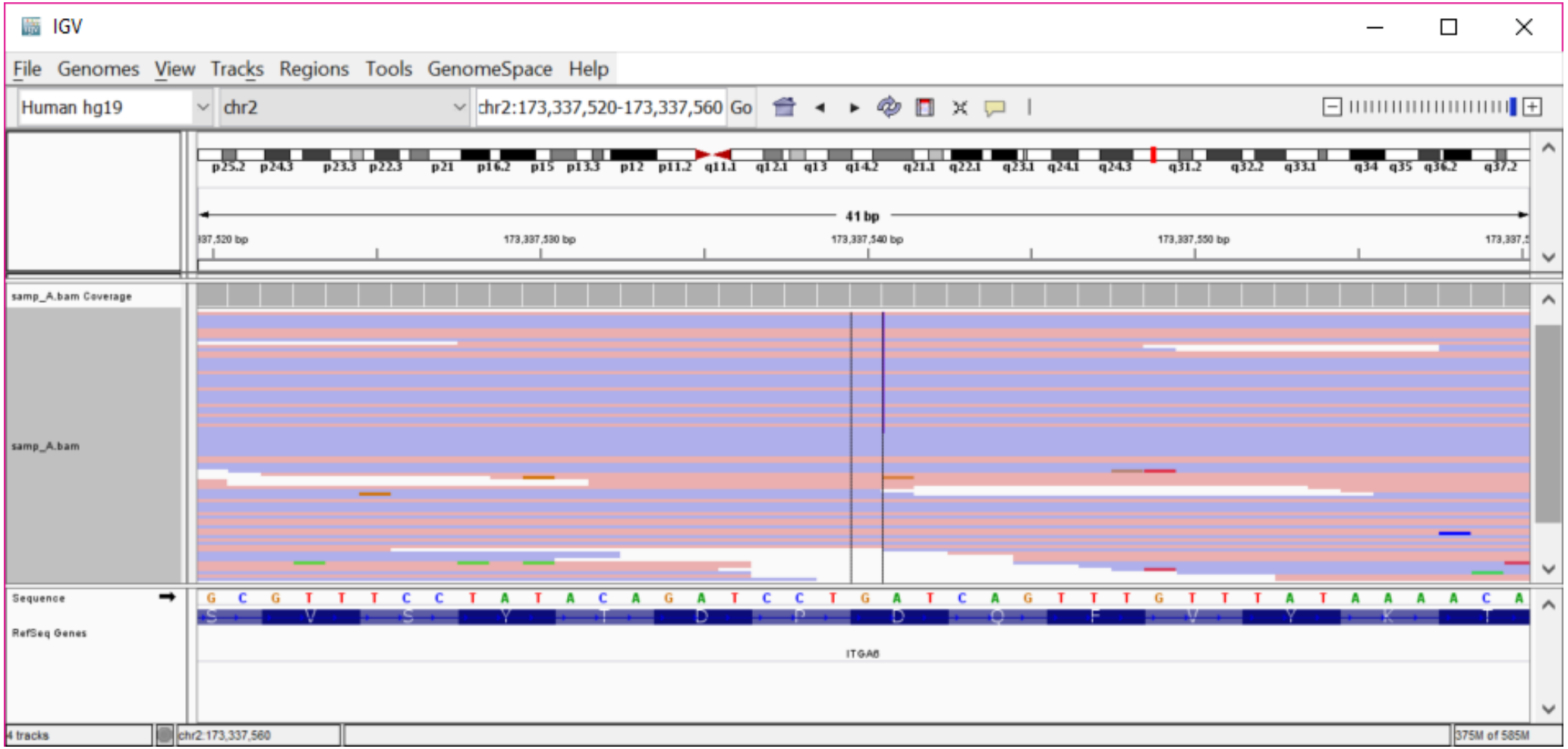
IGV: samp_A [chr2:173337540 InsA]



IGV: samp_A [chr2:173337540 InsA]



IGV: samp_A [chr2:173337540 InsA]



IGV: samp_A [chr2:173368897 G>C]

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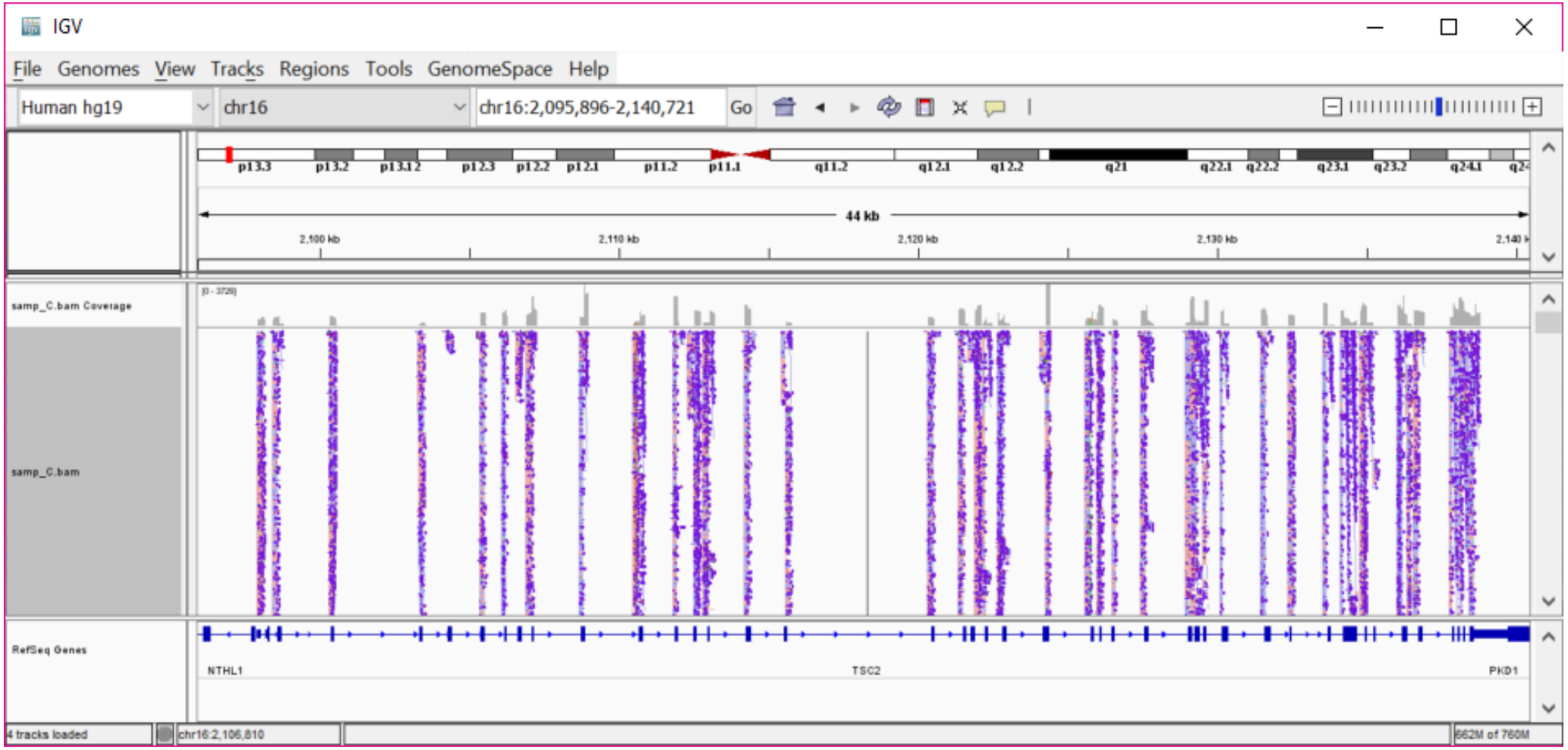
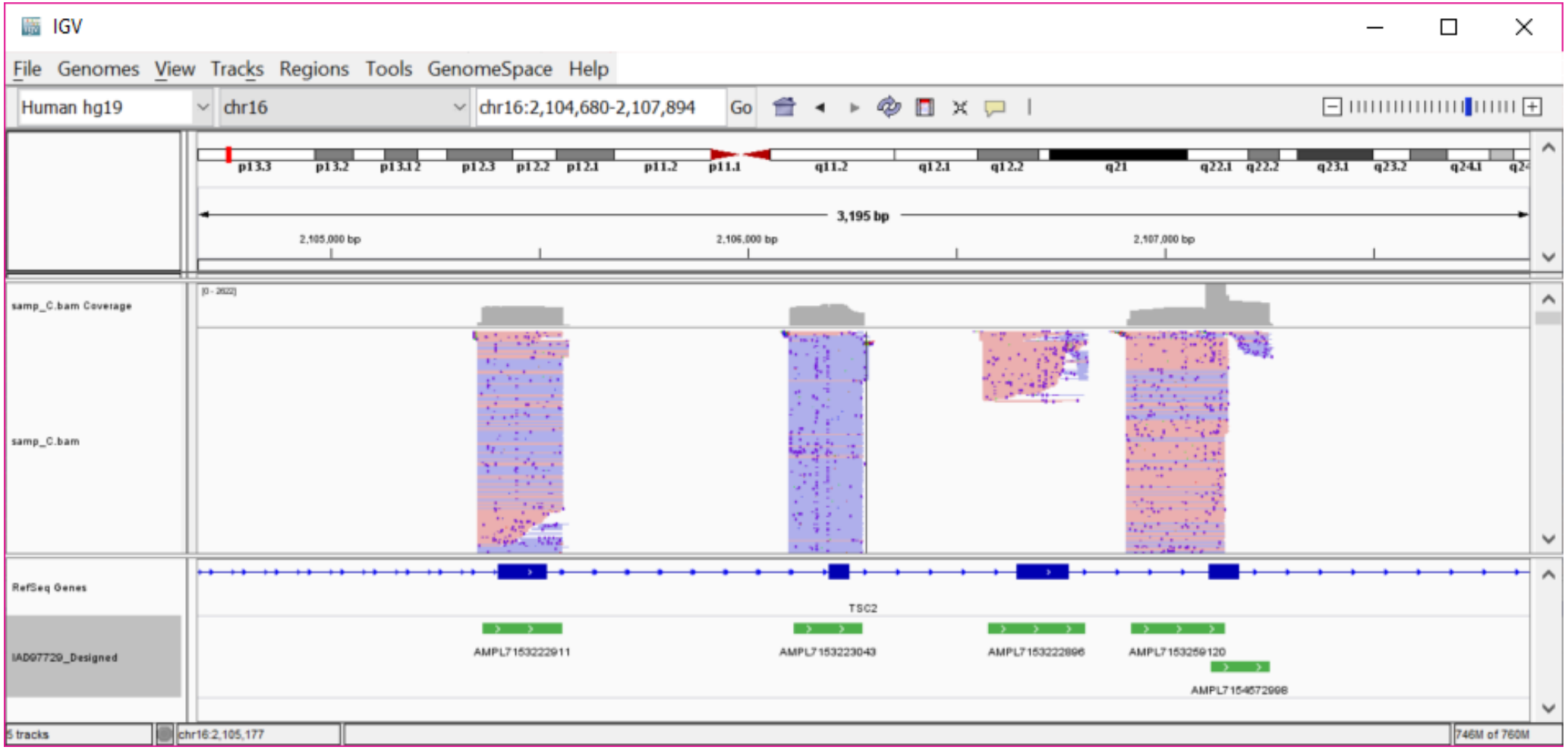
3	chr2	173292713	173292713	C	T	intronic	ITGA6
4	chr2	173330549	173330549	T	G	intronic	ITGA6
5	chr2	173332115	173332115	G	A	intronic	ITGA6
6	chr2	173334161	173334161	-	ATGATTTAGTACC	intronic	ITGA6
7	chr2	173337495	173337495	C	T	intronic	ITGA6
8	chr2	173337540	173337540	-	A	exonic	ITGA6
9	chr2	173337681	173337681	G	T	intronic	ITGA6
10	chr2	173340198	173340198	A	C	intronic	ITGA6
11	chr2	173352103	173352103	C	T	exonic	ITGA6
12	chr2	173353060	173353060	G	A	intronic	ITGA6
13	chr2	173353318	173353318	G	A	intronic	ITGA6
14	chr2	173355907	173355907	A	C	intronic	ITGA6
15	chr2	173368897	173368897	G	C	exonic	ITGA6

IGV: samp_A [chr2:173368897 G>C]

IGV: samp_C [TSC 2]



IGV: samp_C [BAM + BED]



IGV: samp_C [chr16:2138294 Del_18bp]

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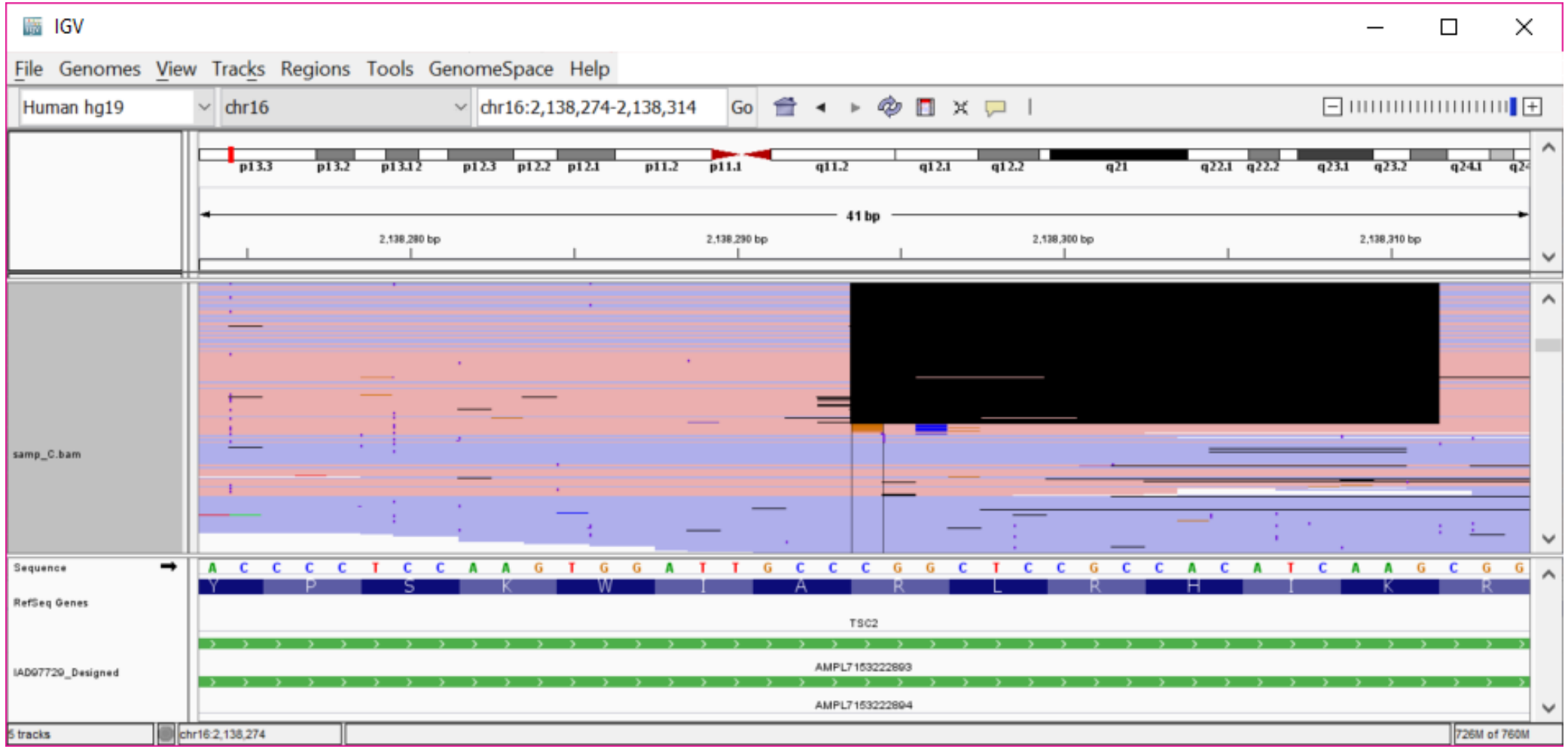
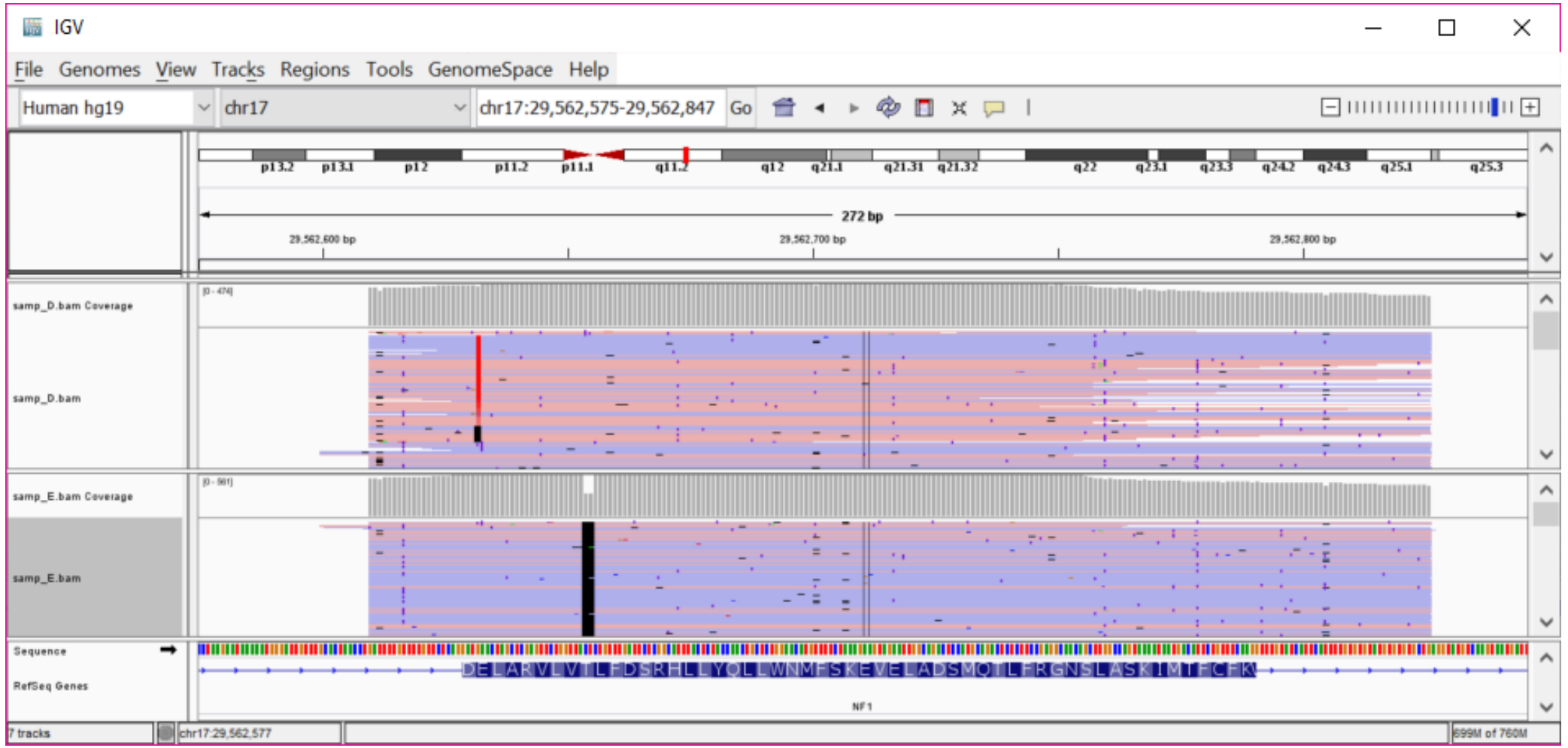
3	chr16	2125769	2125769	G	A	intronic	TSC2
4	chr16	2138084	2138084	A	C	exonic	TSC2
5	chr16	2138087	2138087	G	-	exonic	TSC2
6	chr16	2138086	2138086	C	G	exonic	TSC2
7	chr16	2138294	2138311	CGGCTCCGCCACATCAAG	-	exonic	TSC2

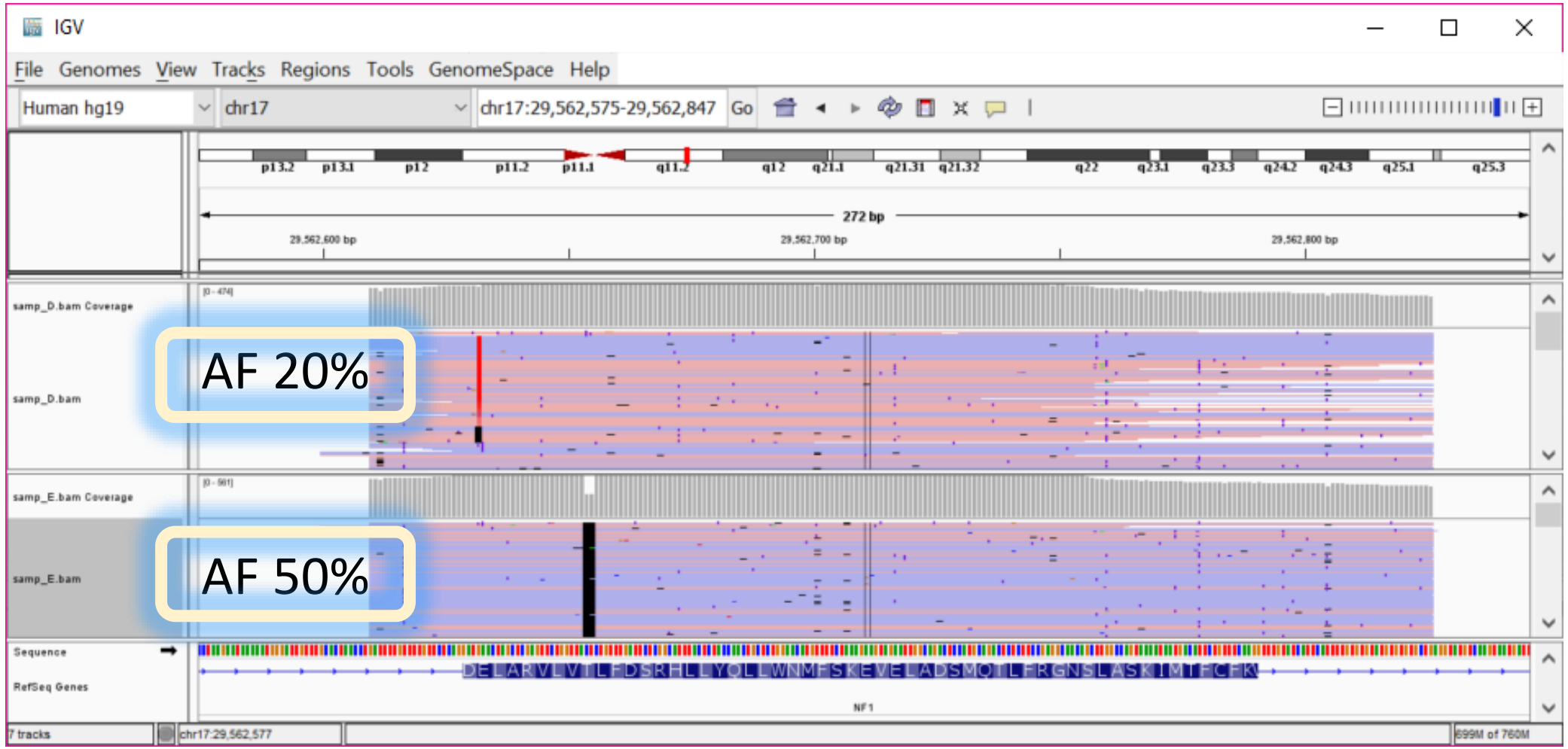
IGV: samp_C [del]



IGV: samp_D & samp_E [NF1 exon28]



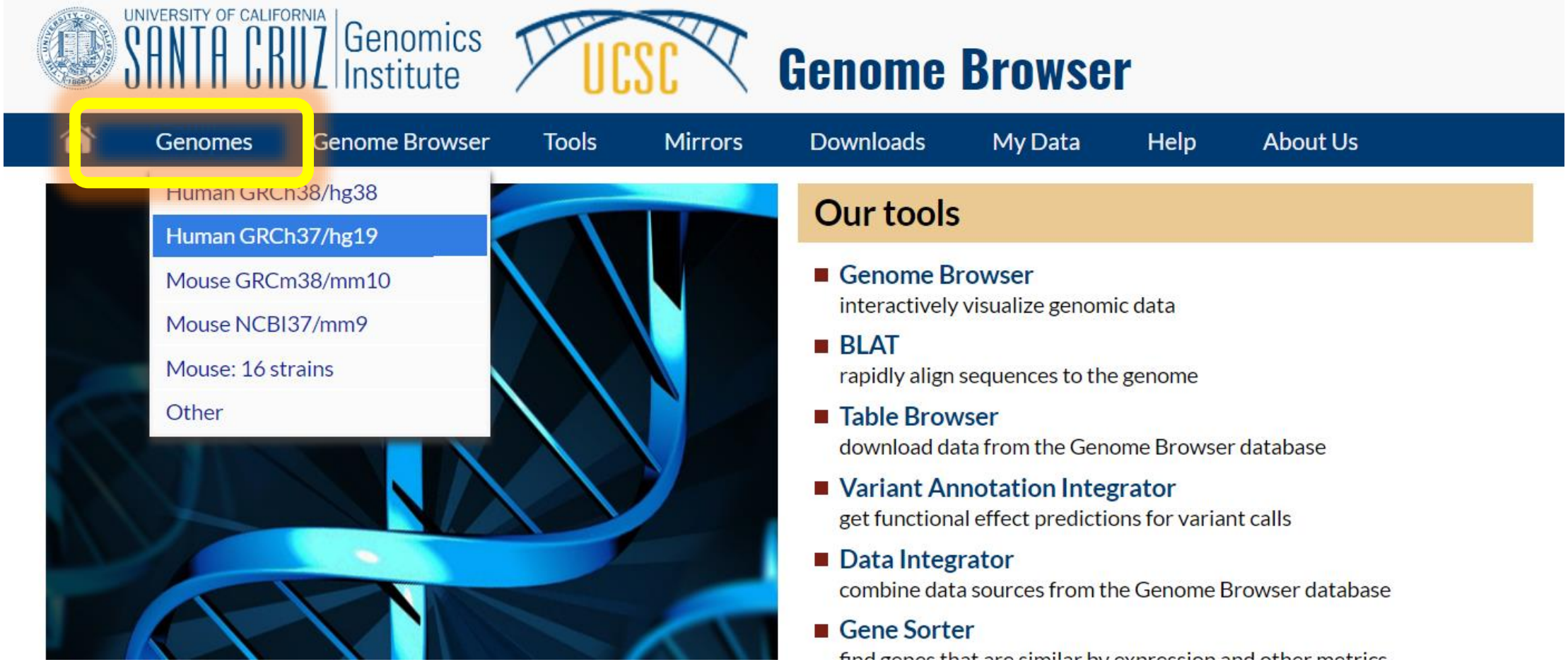
IGV: samp_D & samp_E [allele frequency]



UCSC Genome Browser

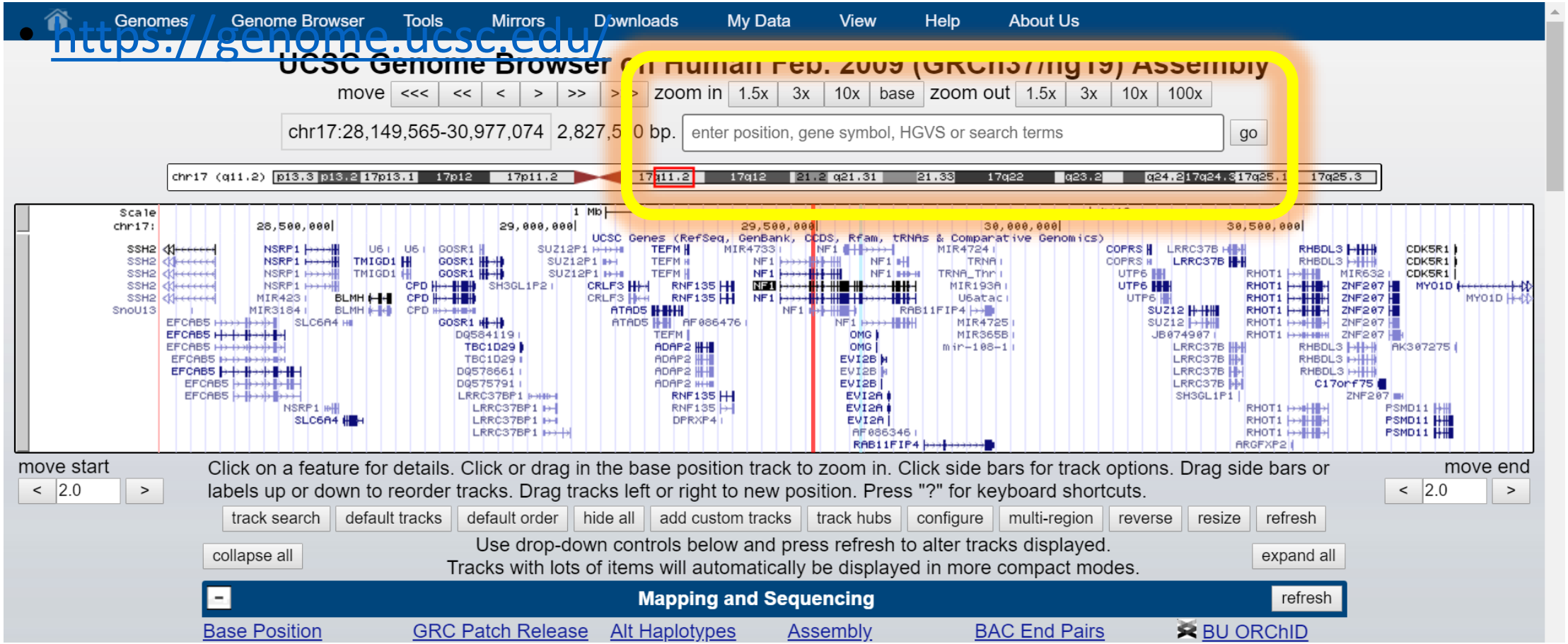
- https://genome.ucsc.edu/

UCSC Genome Browser



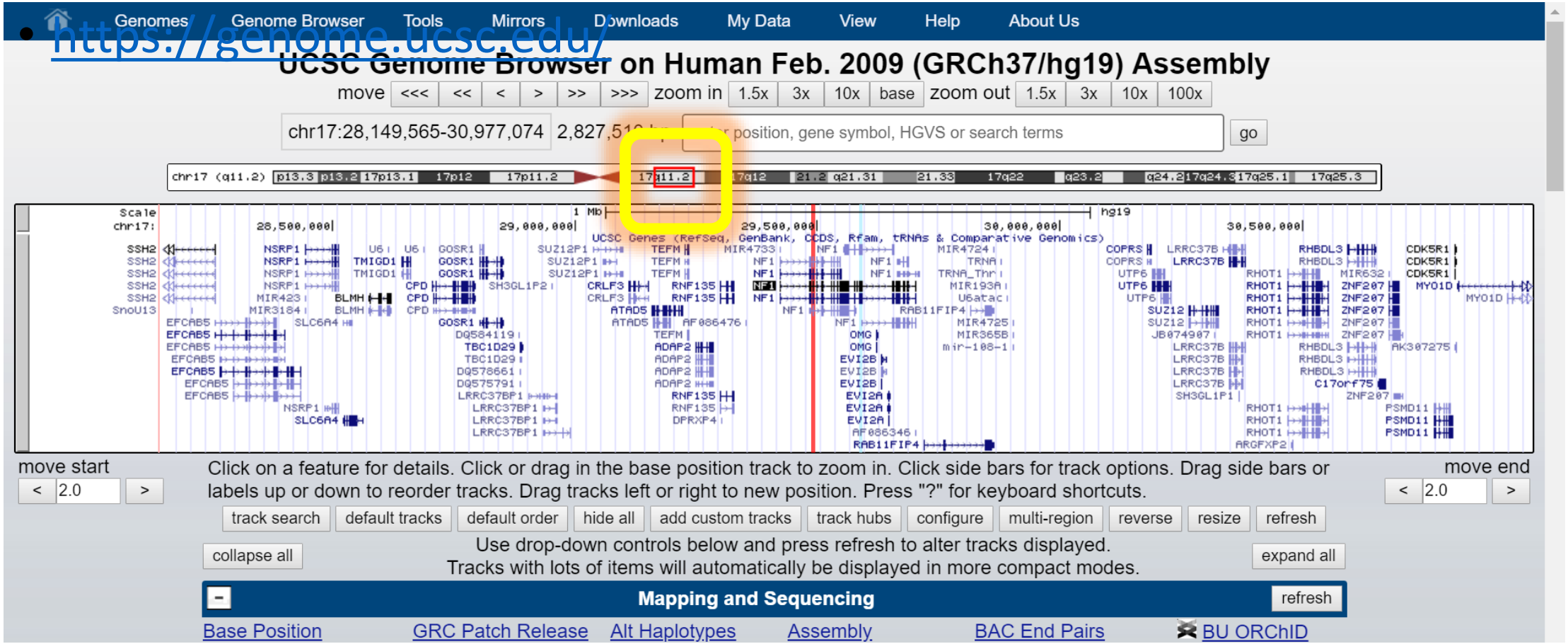
UCSC Genome Browser

- https://genome.ucsc.edu/



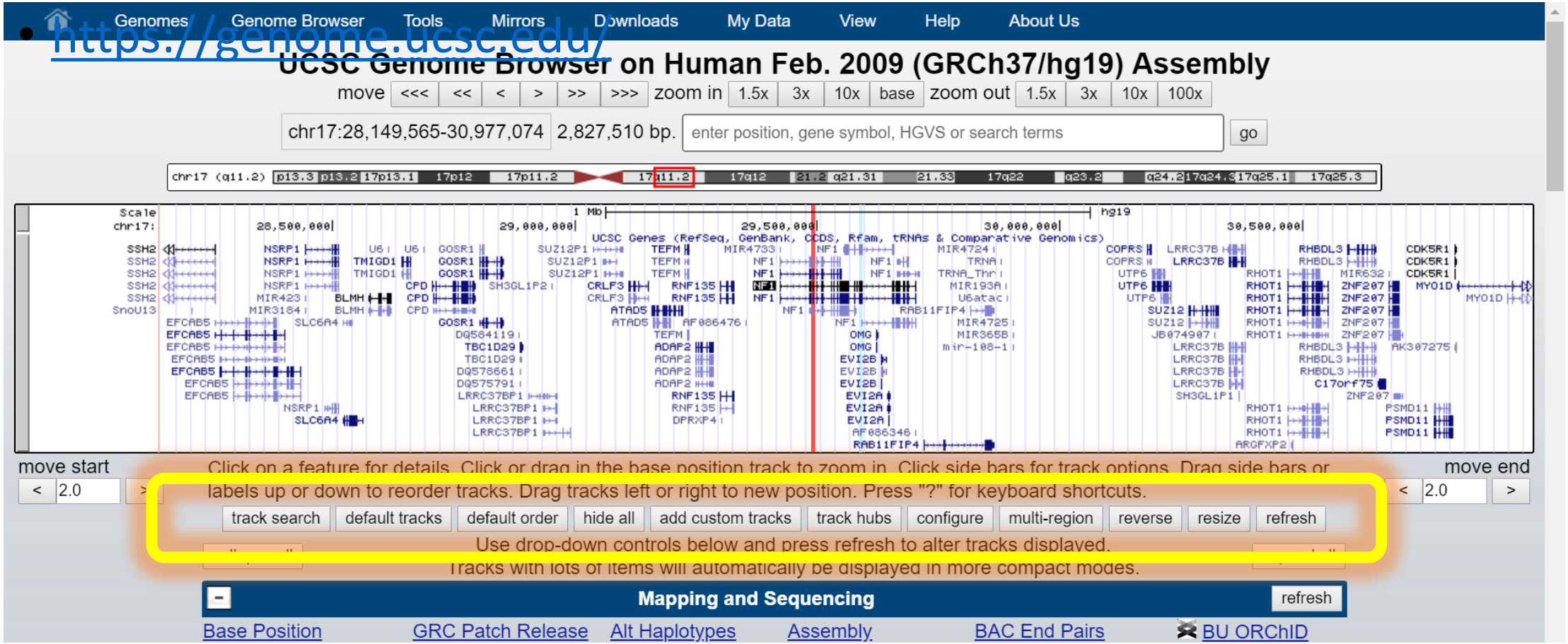
UCSC Genome Browser

- https://genome.ucsc.edu/



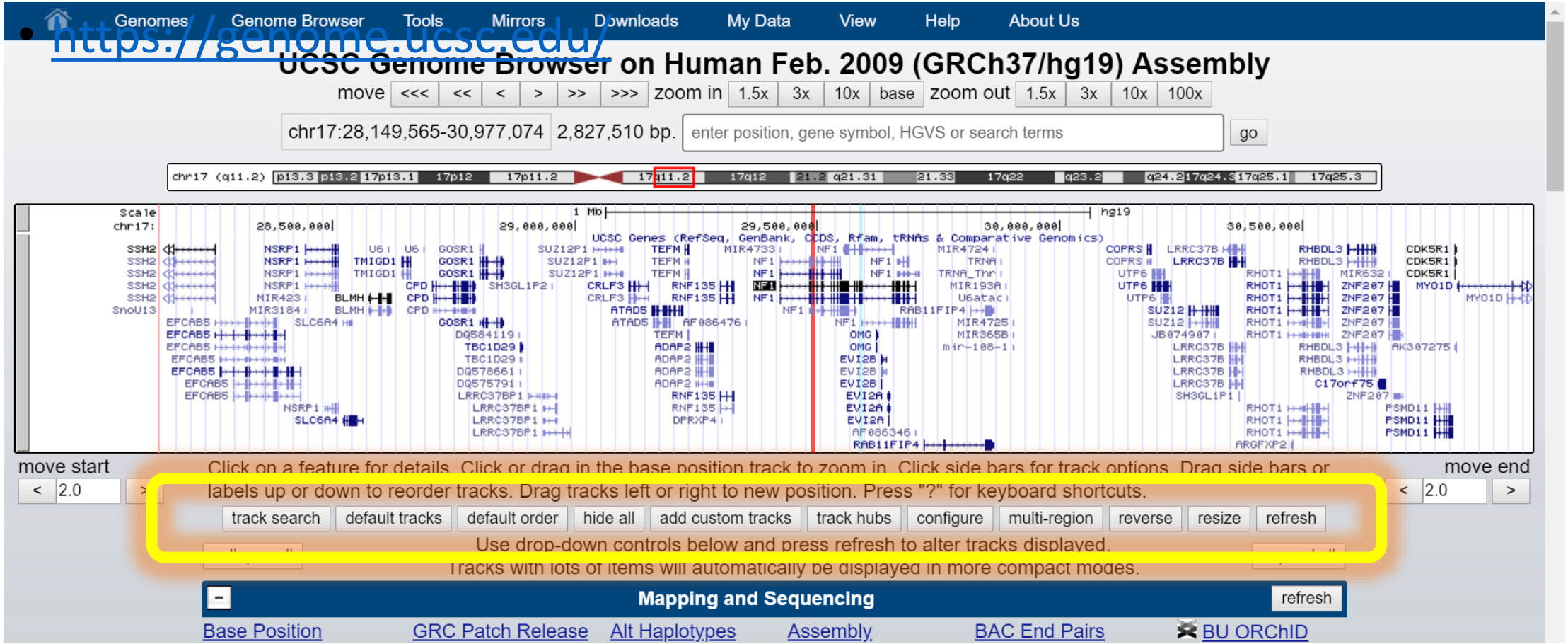
UCSC Genome Browser

- https://genome.ucsc.edu/

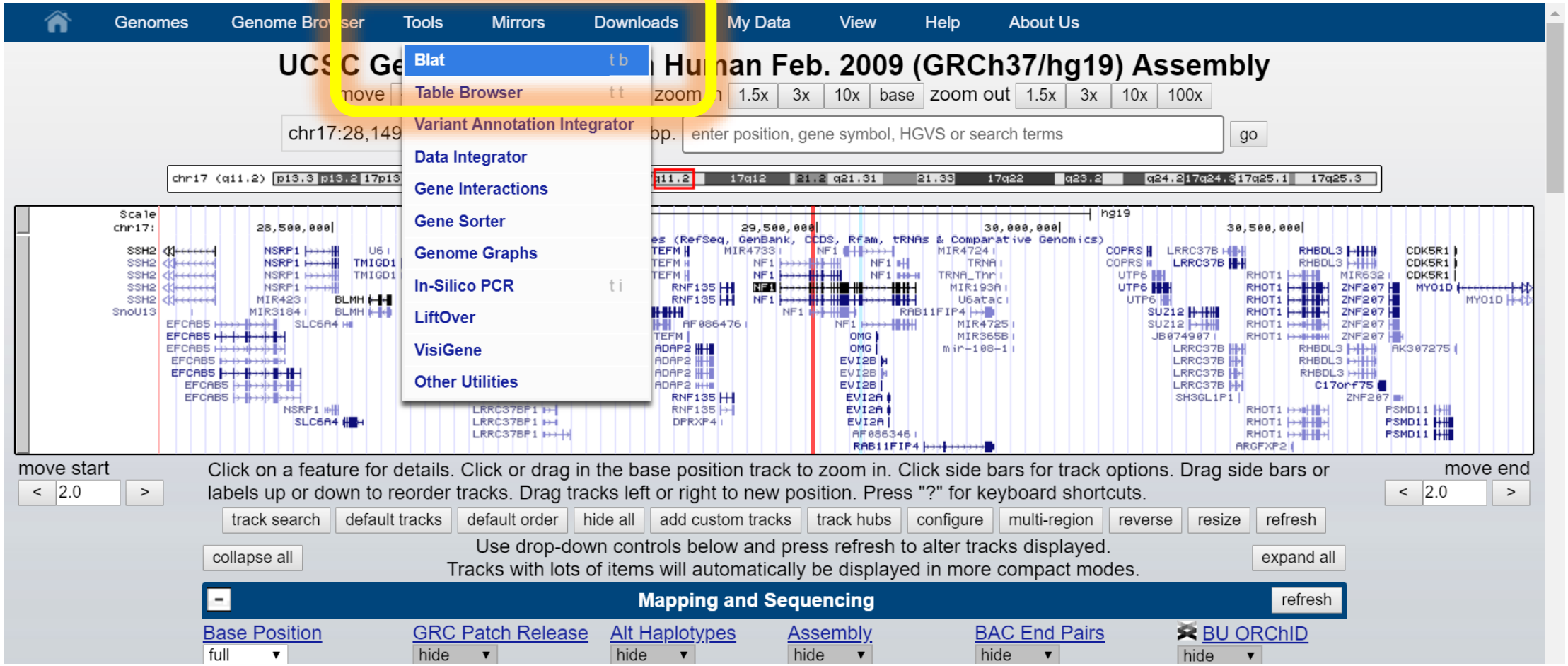


UCSC Genome Browser

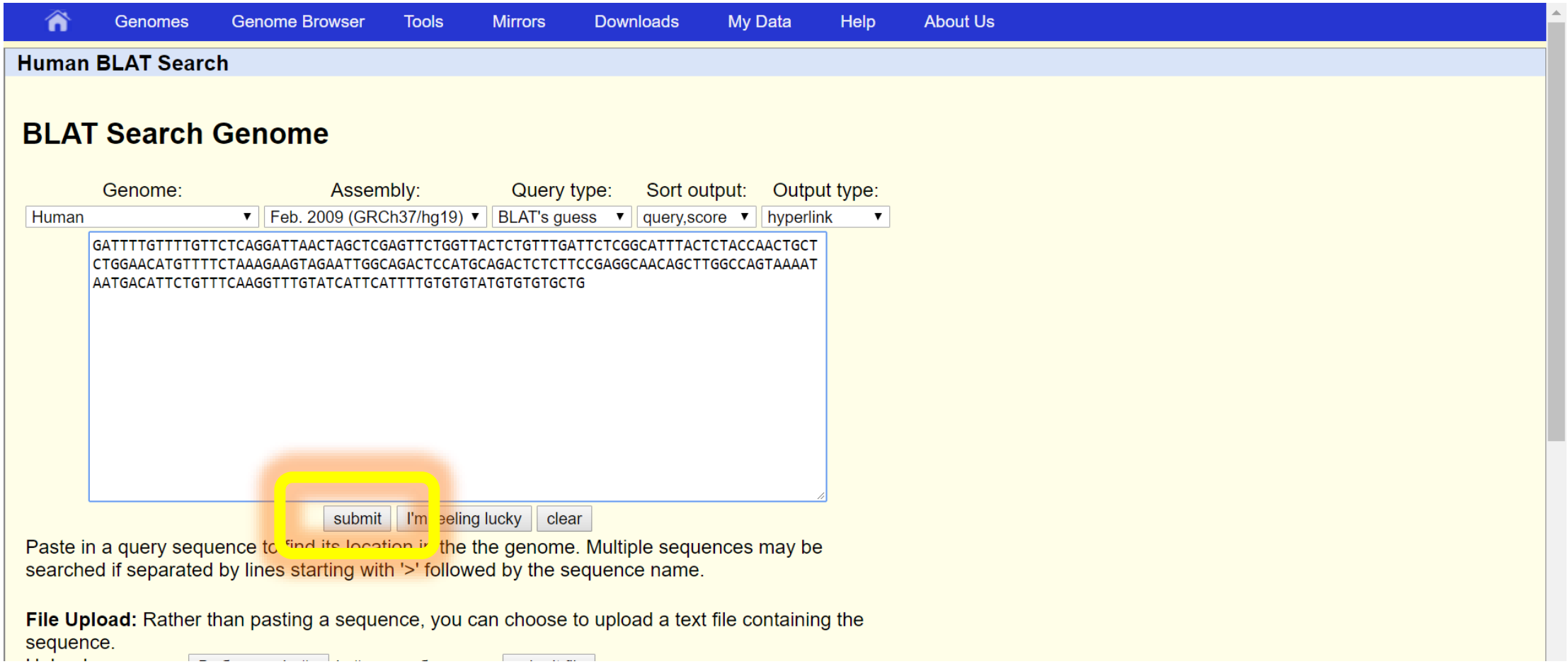
- https://genome.ucsc.edu/



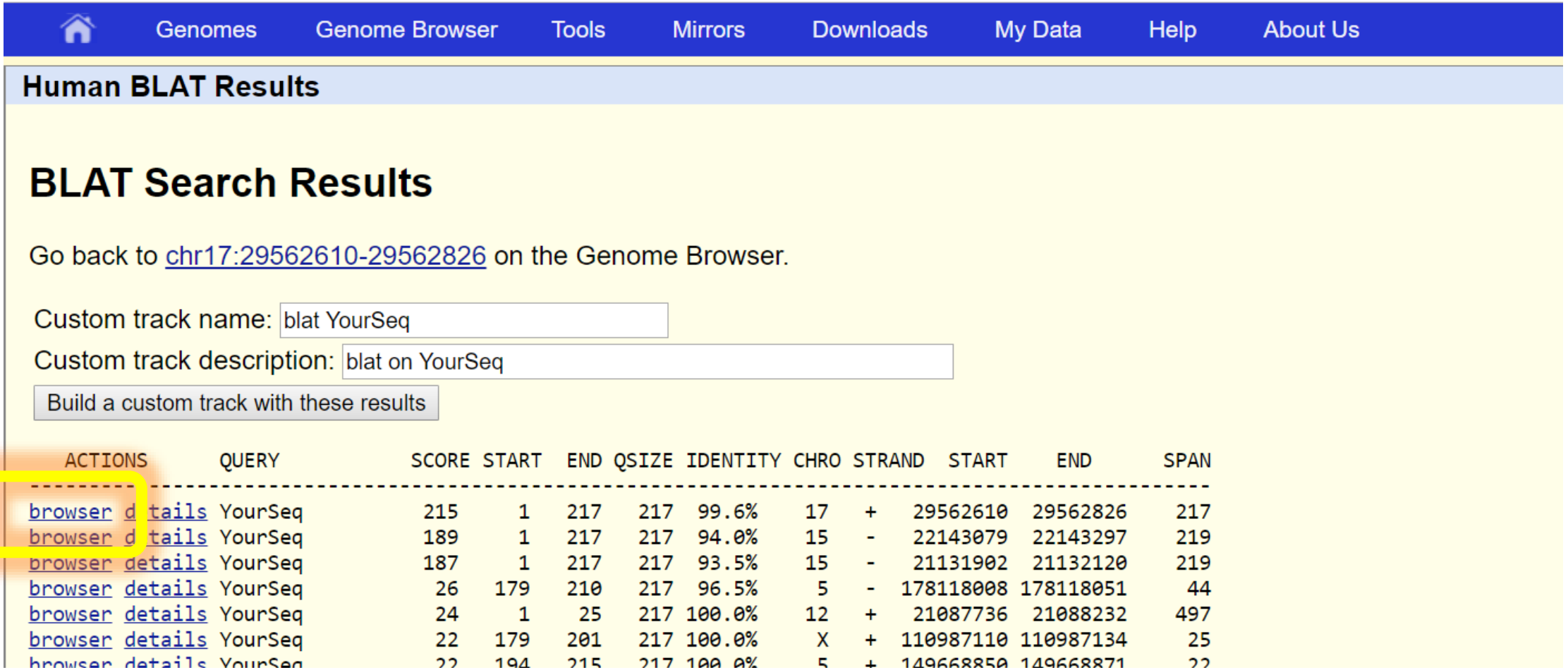
UCSC Genome Browser



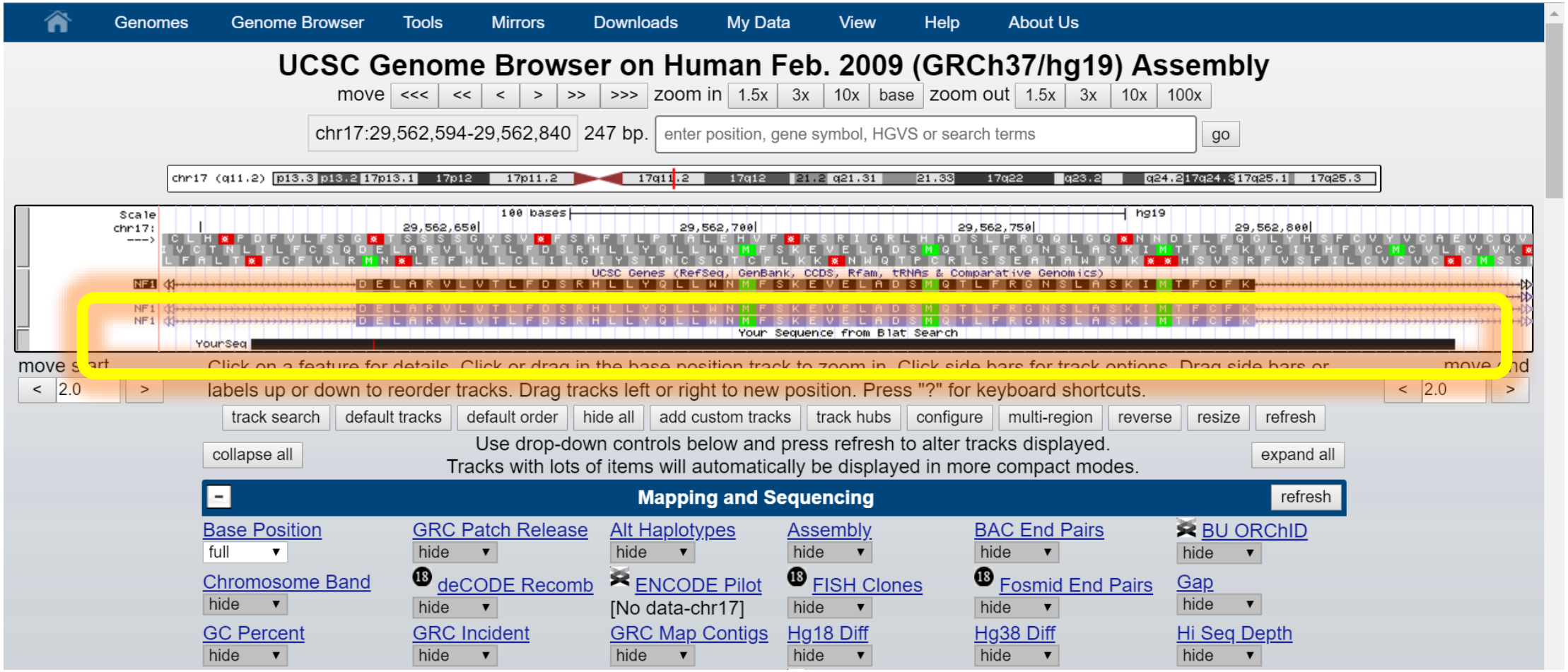
UCSC Genome Browser



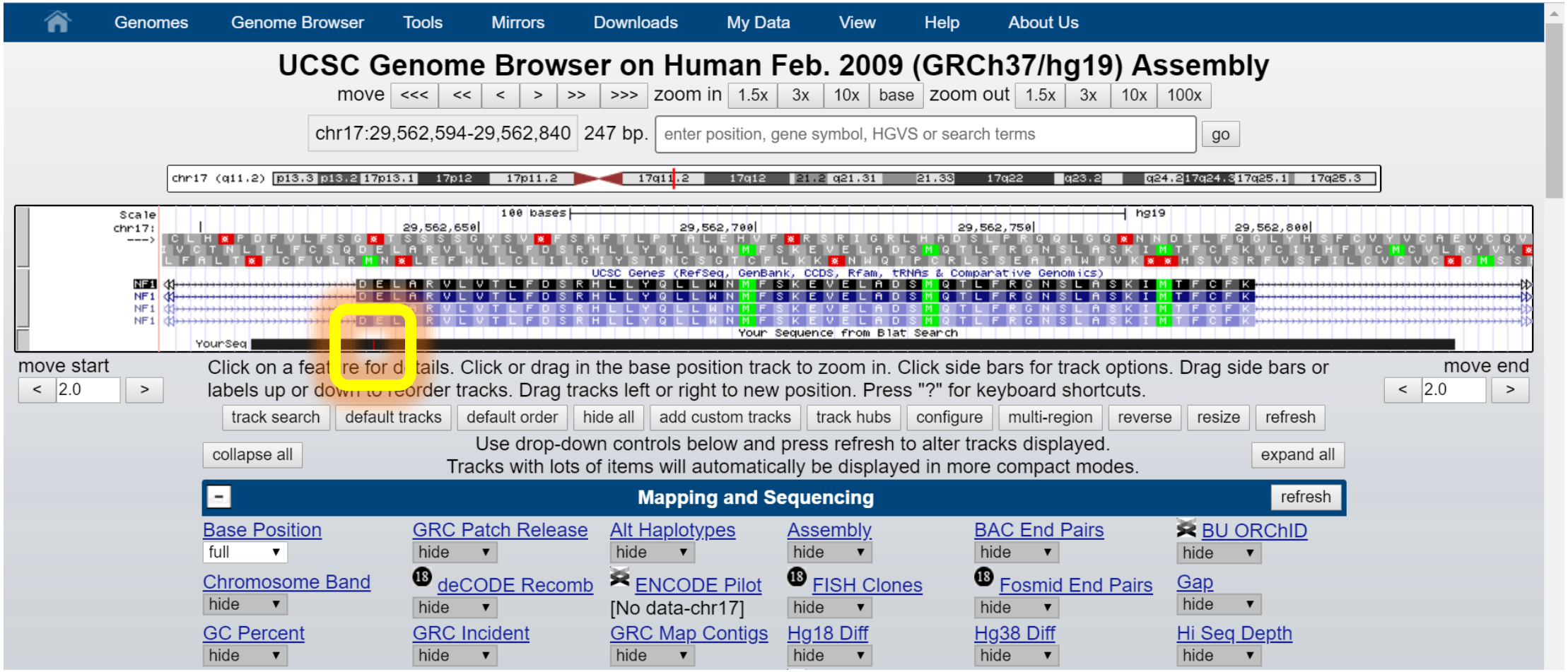
UCSC Genome Browser



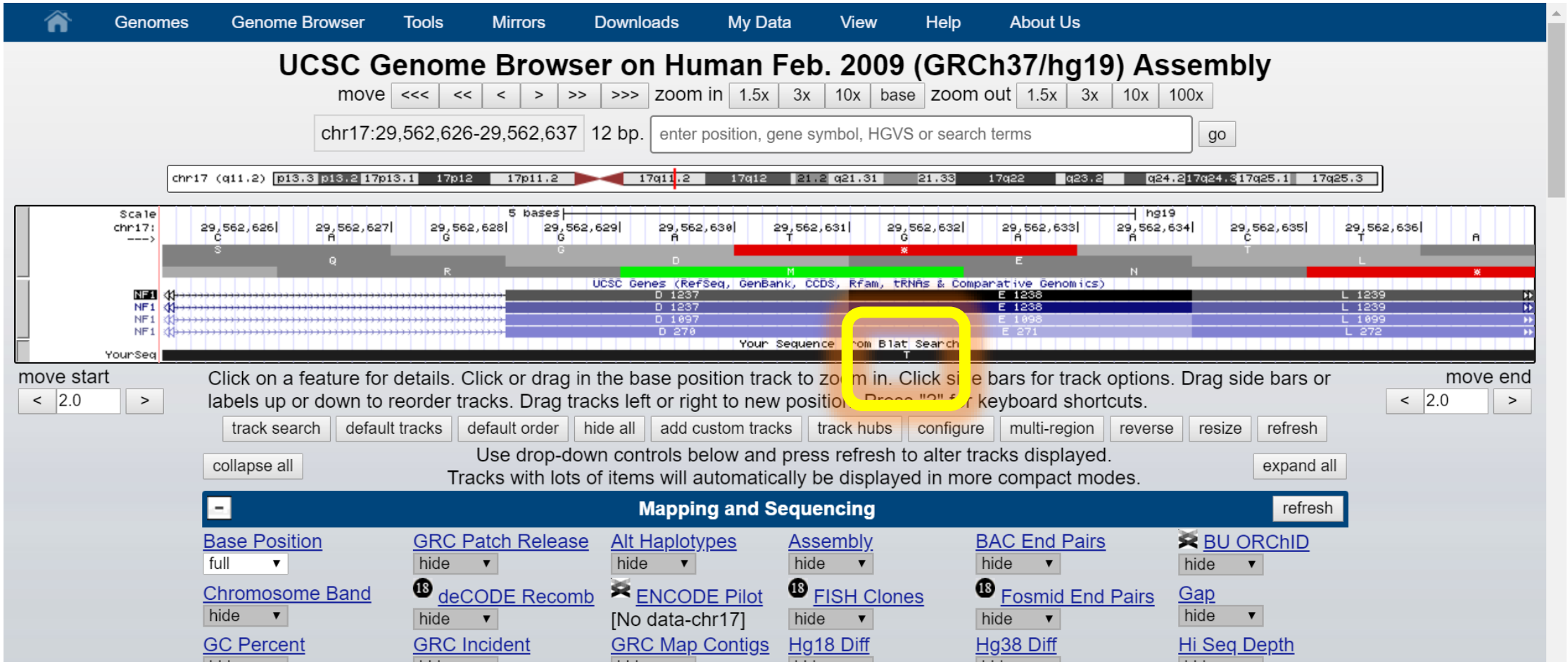
UCSC Genome Browser



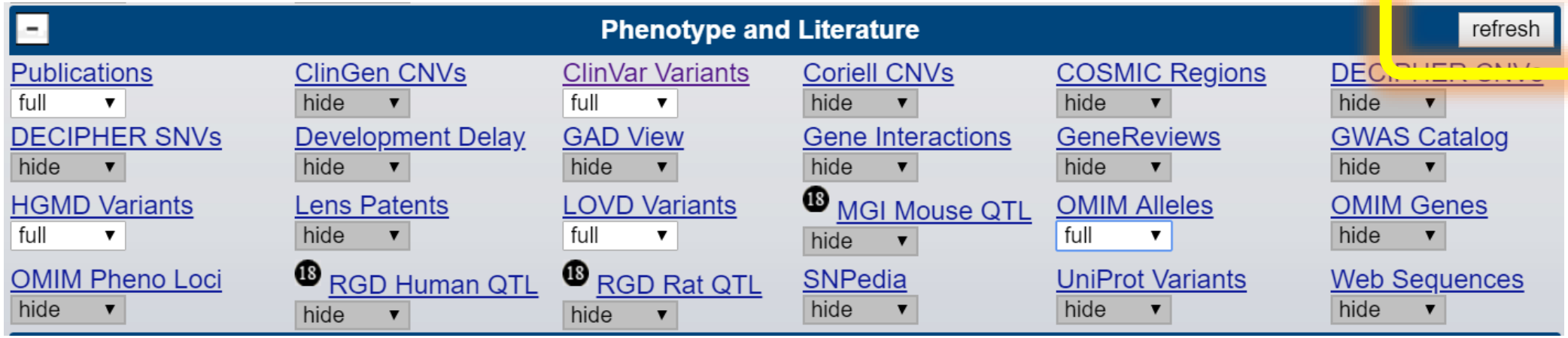
UCSC Genome Browser



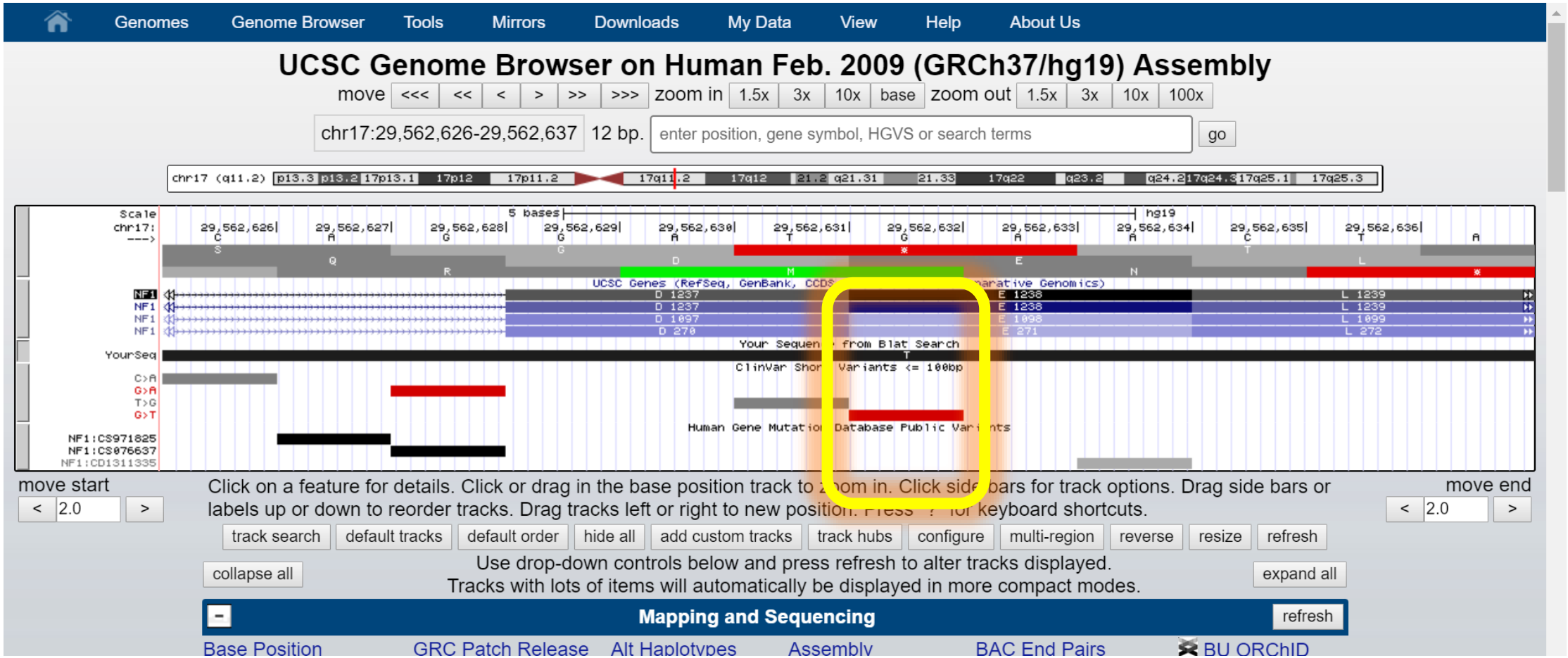
UCSC Genome Browser



UCSC Genome Browser



UCSC Genome Browser



Спасибо за внимание

User guides

IGV

- http://software.broadinstitute.org/software/igv/userguide

UCSC

https://genome.ucsc.edu/goldenpath/help/hgTracksHelp.html