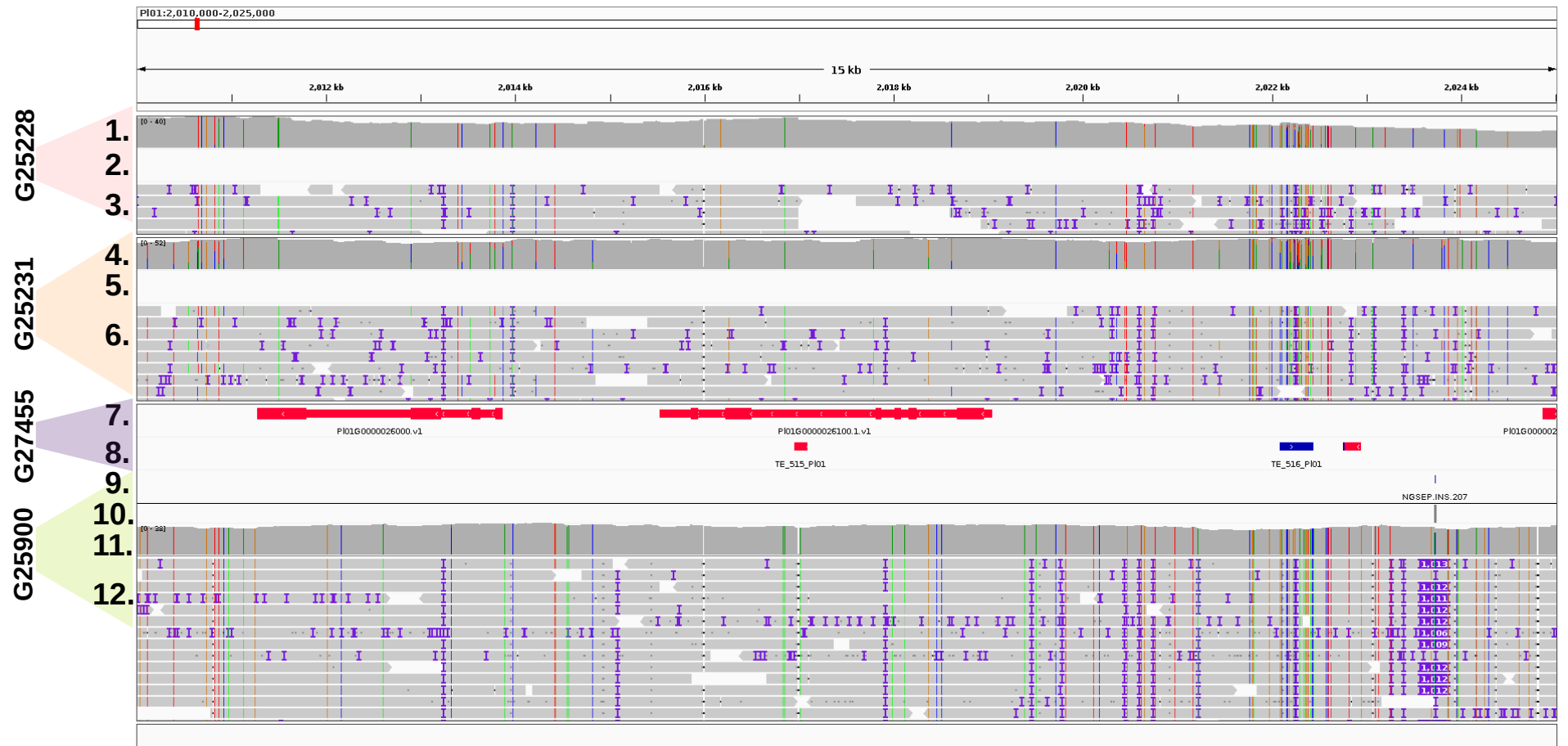


Visualization of read alignments and SV predictions against the mesoamerican Lima bean genome (G27455) for genes associated with agronomical characteristics. This is the information included for all cases:

- 1.** Read depth from the wild mesoamerican accessions G25228.
- 2.** Predicted SVs from the wild mesoamerican accessions G25228.
- 3.** Alignments of reads from the wild mesoamerican accessions G25228
- 4.** Read depth from the wild mesoamerican accessions G25231.
- 5.** Predicted SVs from the wild mesoamerican accessions G25231.
- 6.** Alignments of reads from the wild mesoamerican accessions G25231.
- 7.** Reference gene models.
- 8.** Reference Tes.
- 9.** SVs predicted from read alignments between the reference and the domesticated Andean accession G25900.
- 10.** SVs predicted from alignment of the genome assemblies between the reference and G25900.
- 11.** Read depth for G25900.
- 12.** Aligned reads for G25900.

PI01G0000026100.v1 (ALC)

-Insertion of 1012 bp in G25900 at 4 Kbp in the promoter.



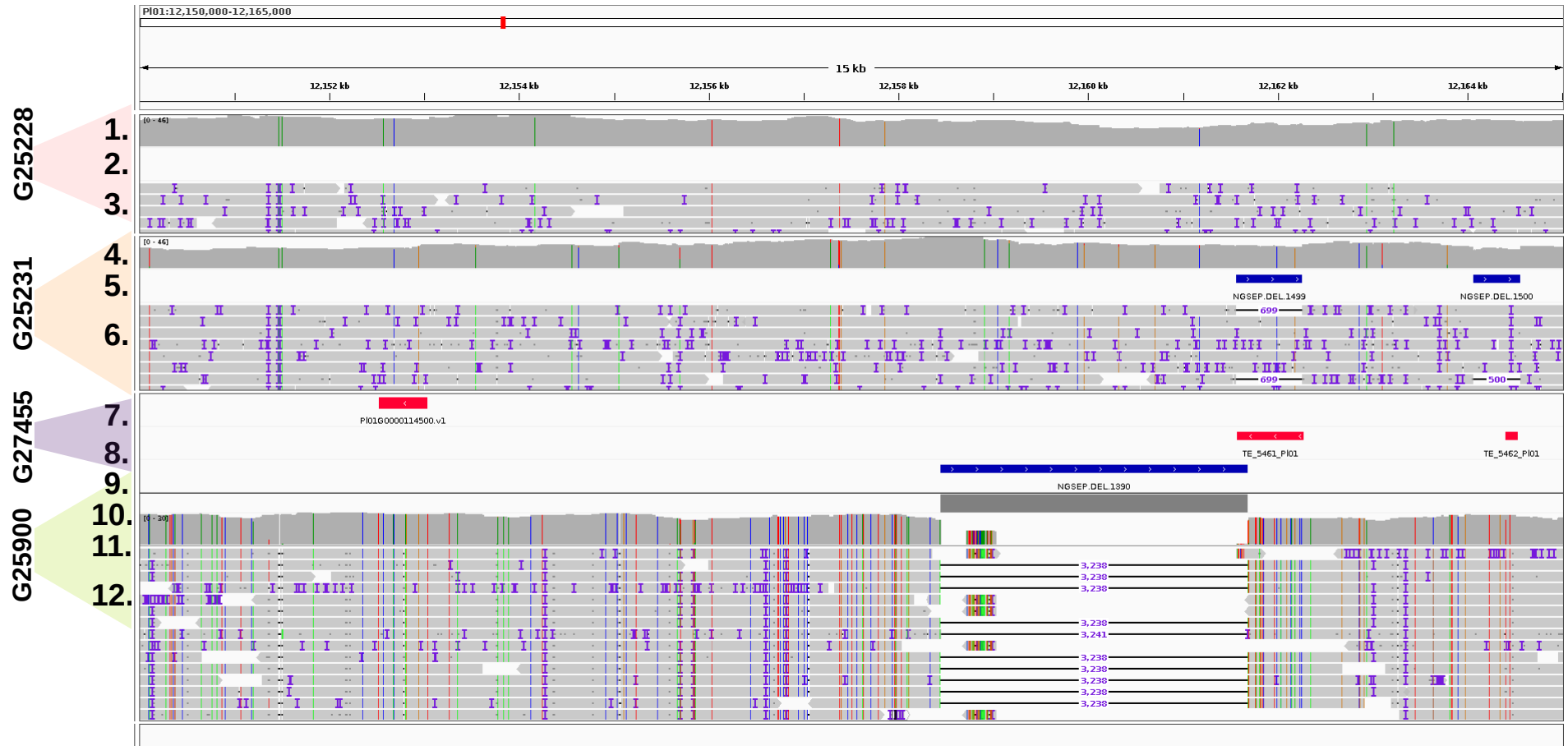
PI01G0000079800.v1 (MYB56)

- Insertion in G25228, G25231 and G25900 at 600 bp downstream.
- Deletion of 3,313 bp in G25900 at 4 Kbp upstream.
- Deletion of 955 bp in G25228, G25231 and G25900 at 9 Kbp upstream.



PI01G0000114500.v1 (KNU)

-Deletion of 3,238 bp in G25900 at 5 kbp upstream.



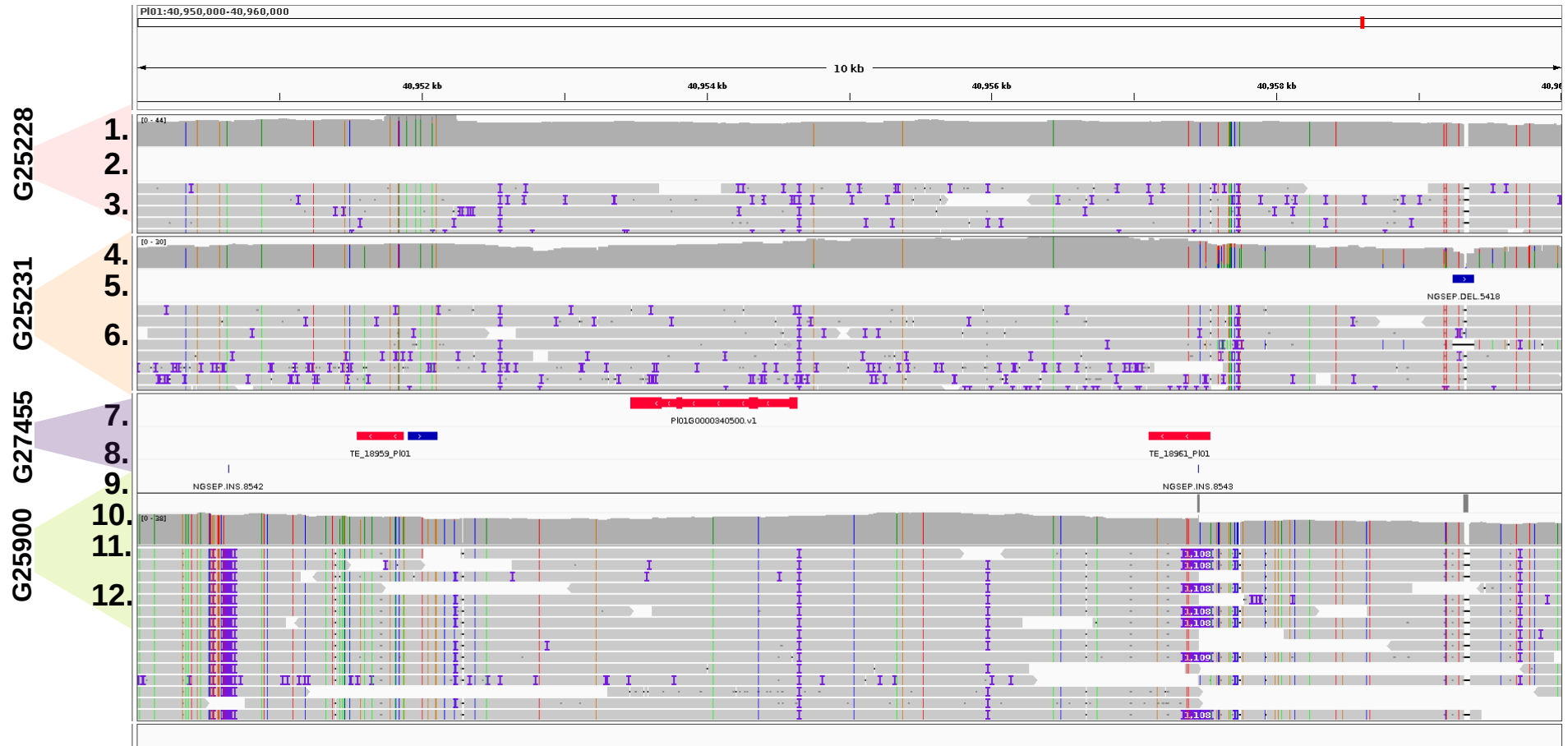
PI01G0000140900.v1 (BRG-1)

- TEs in the upstream region of BRG-1 gene in G27455.
- Deletion of 5,334 bp in G25900 at 1 Kbp upstream.
- Deletion of 9,795 bp in G25900 at 2 Kbp upstream.



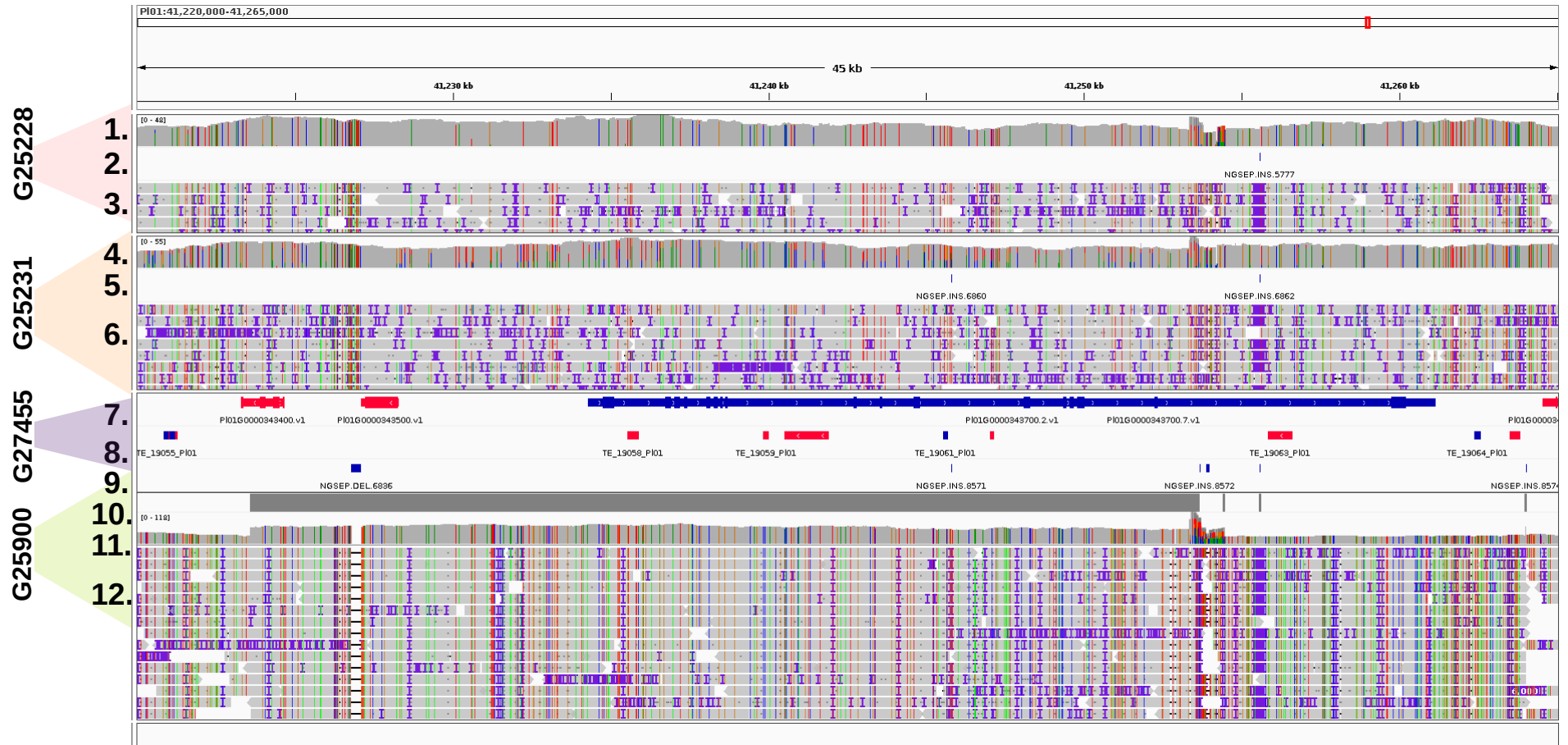
PI01G0000340500.v1 (fin,TFL1)

- Insertion of 1100 bp at 2.5 Kbp upstream in G25900.
- Insertion at 2.3 Kbp downstream in G25900.



PI01G0000343500.v1 (LWD1) / PI01G0000343700.v1(SPINDLY)

- SV in G25900 that involve LWD1 and almost complete SPINDLY gene.
- Deletion downstream to LWD1 gene in G25900.
- Insertion in the middle of last exon of SPINDLY in G25228 and G25231.



PI01G0000366100.v1 (Raffinose)

- Deletion of 342 bp, 240 bp and 449 bp in the PI01G0000366000 gene in G25900.
- Insertion downstream at 400 bp in G25231.



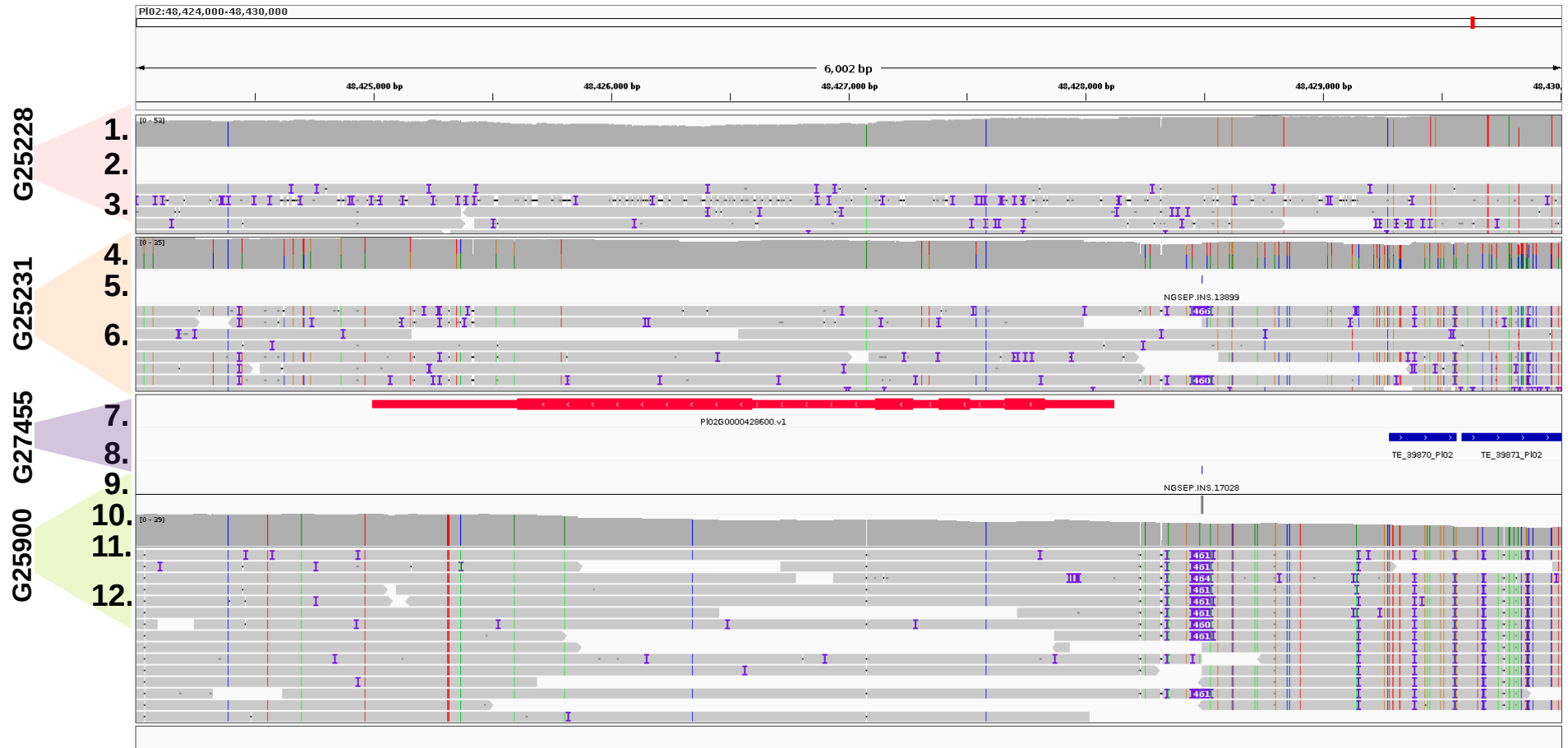
PI02G0000404800.v1 (IND)

- TE activity upstream and downstream.
- 15 kbp deletion of TEs 3 kbp upstream in G25900.
- 4 kbp deletion 2 kbp upstream in G25228 and G25231.
- Different large indels downstream.
- Three downstream genes deleted in G25228 and G25231.



PI02G0000428600.v1 (ACS6)

-Insertion of 461 bp at 400 bp upstream in G25900 and G25231.

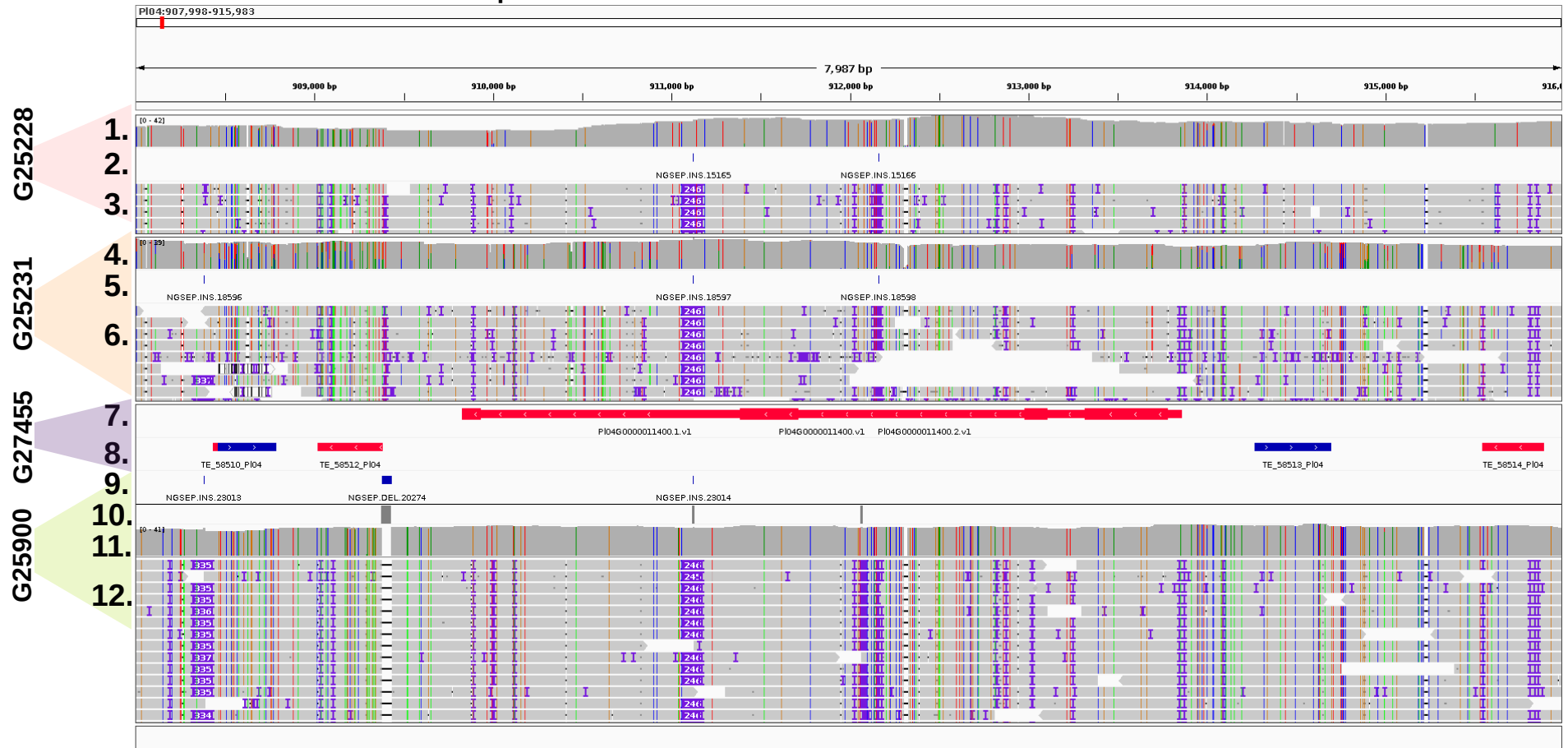


- Insertion in G25900 at 1,430 bp in the 3' UTR region-PDH1.
- TE in G25900 at 1 kbp upstream to PHDH1.



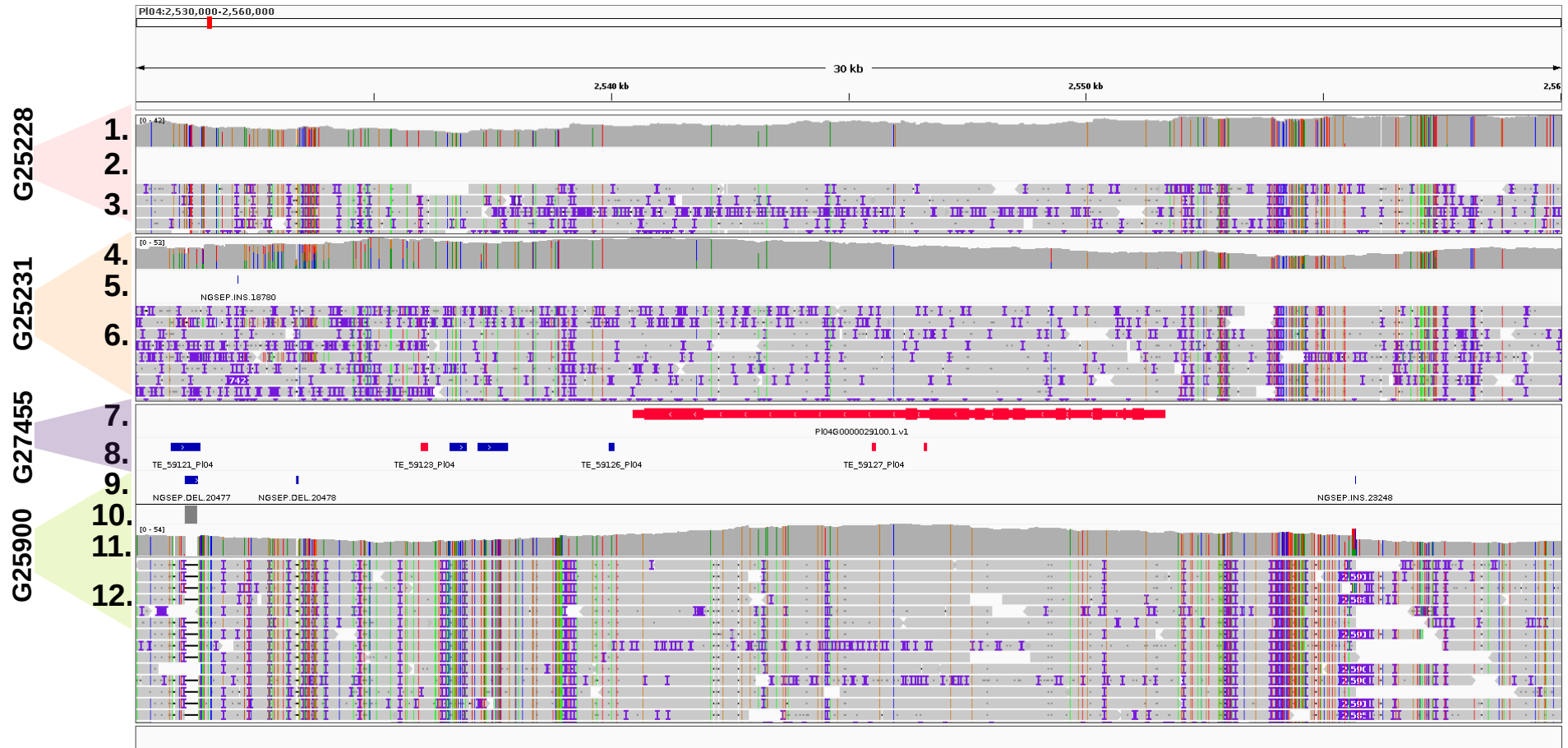
PI04G0000011400.v1 (ATMY B118)

- Insertion of 246 bp in G25228, G25231 and G25900 in ATMY gene.
- Insertion in G25228, G25231 and G25900 in the second intron.
- Deletion in G25900 at 500 bp downstream.



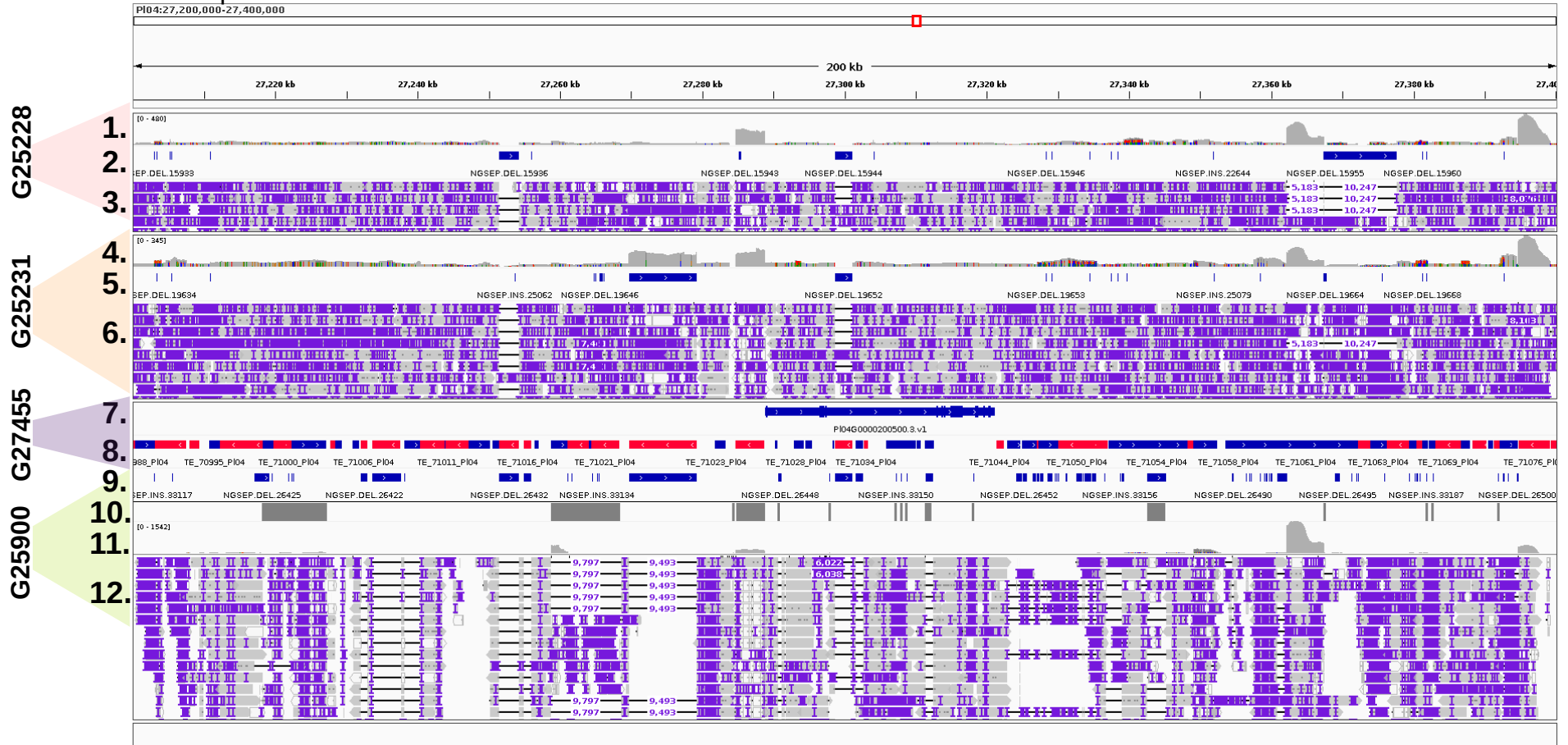
PI04G0000029100.v1 (ABCB19)

- Insertion of 2590 bp in G25900 at 50 Kbp upstream.
- Deletion in G25900 at 60 kbp downstream.



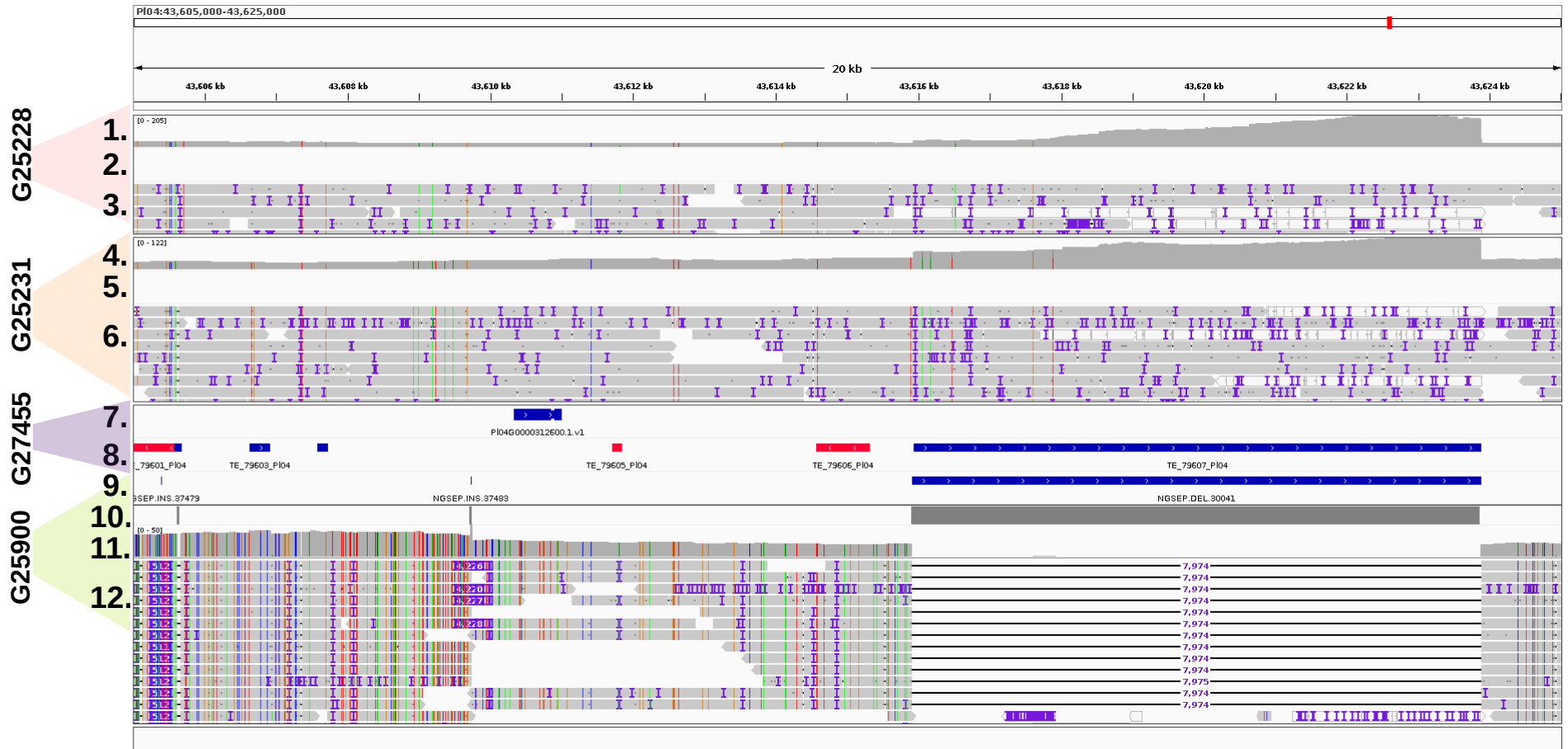
PI04G0000200500.v1 (GIGANTEA)

- Gene surrounded by Tes 100 kbp upstream and downstream.
- Large indels in G25900.
- TE with length 9493 bp 8 kbp upstream deleted in G25900 and G25231.
- 6kbp insertion in the first intron in G25900.
- TE deletion of 1 kbp in the fifth intron in G25228 and G25231.



PI04G0000312600.v1 (DREB1A)

- Deletion of 7974 bp at 5 kbp downstream in G25900.
- Insertion of 4227 bp at 1 kbp upstream in G25900.



PI05G0000263800.v1 (BetaGlucosidase)

-Deletion in G25900 at 500 bp downstream.



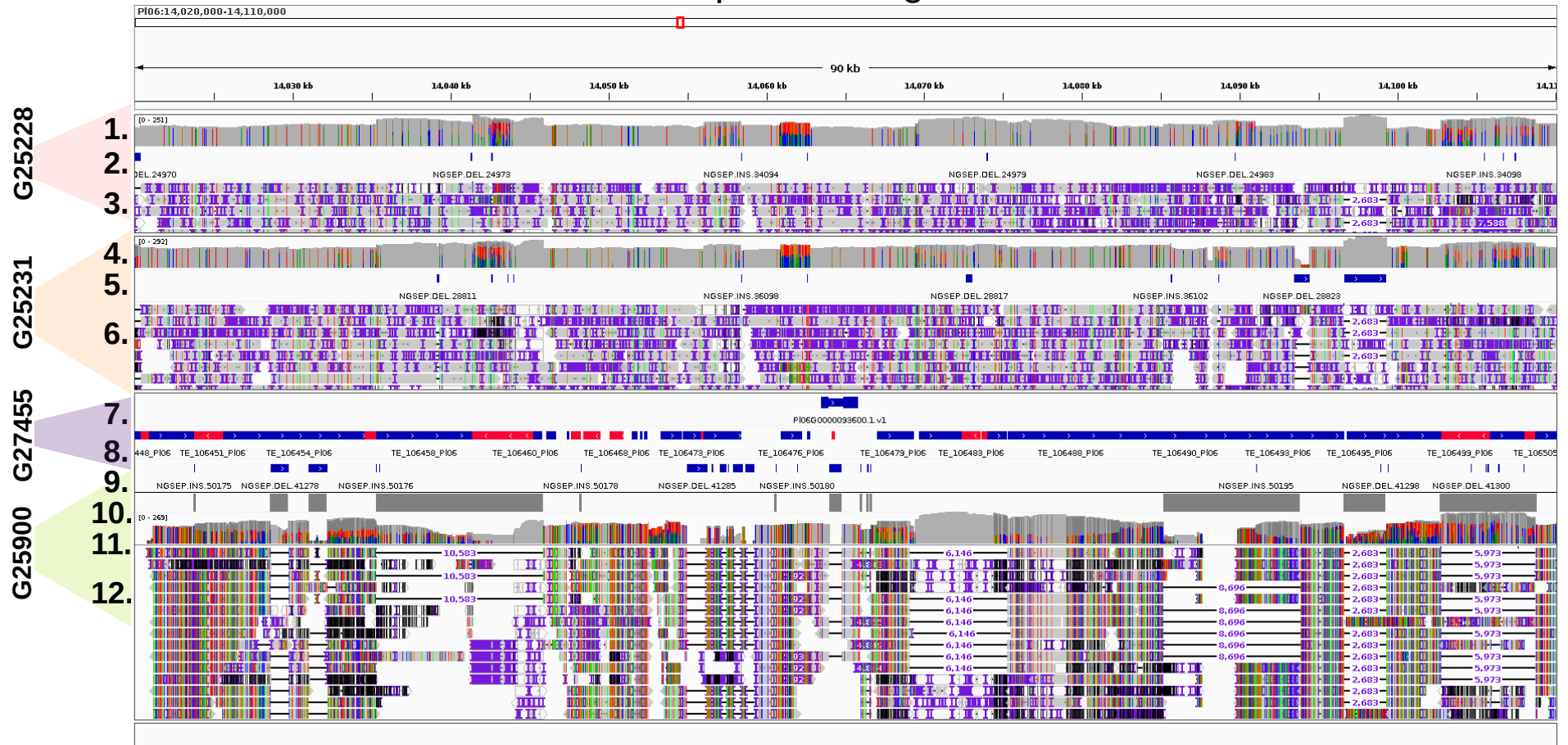
PI06G0000006800.v1/ PI06G0000007700.v1 (CPY79D72)

- TE activity upstream and downstream.
- Deletion of 7,752 bp in G25900 at 3Kbp downstream in PI06G0000006800.
- Insertion upstream in PI06G0000006800 in G25231 and G25228.
- Deletion of 11,708 bp in G25900 at 5Kbp downstream in PI06G0000007700.



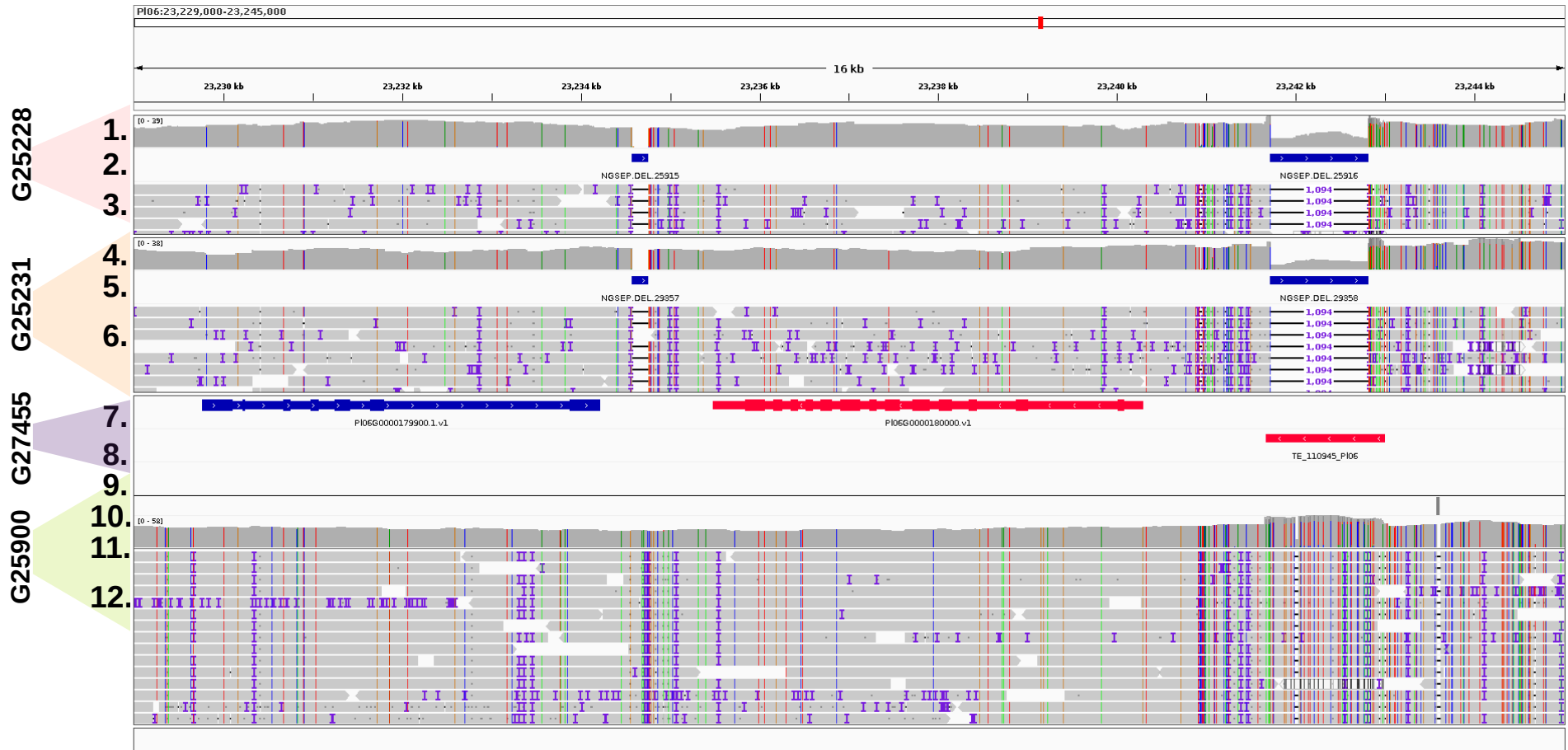
PI06G0000093600.v1 (UGT85K31)

- Insertion in G25900 of 92 bp upstream.
- Deletion in G25900 in the intron region.
- Insertion in G25228 and G25231 in the upstream region.



PI06G0000180000.v1 (ASN1)

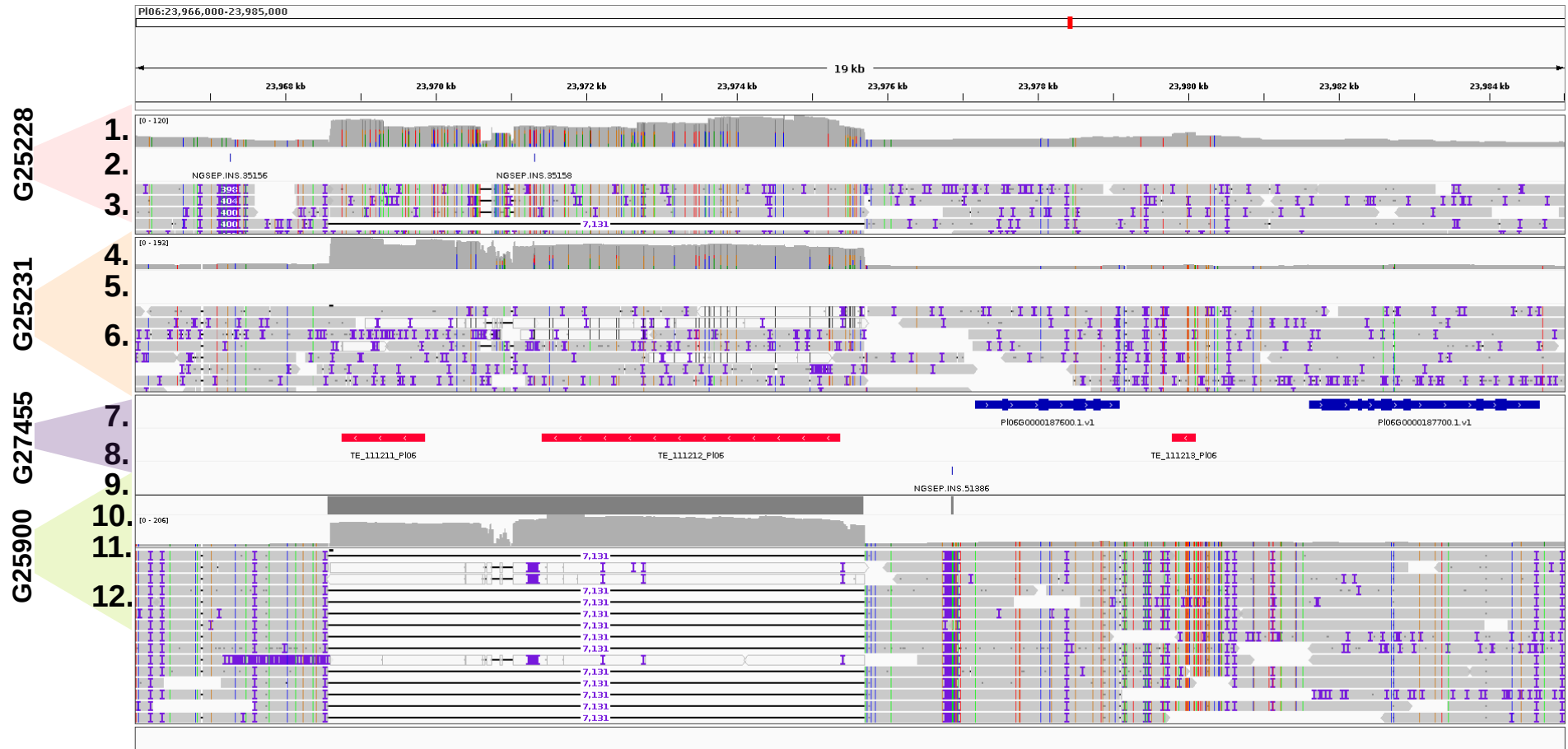
- Deletion in G25228 and G25321 of 1,094 bp at 2 kb upstream.
- Deletion in G25228 and G25321 at 1Kbp downstream.



PI06G0000187600.v1 / PI06G0000187700.v1 (100 seed weight)

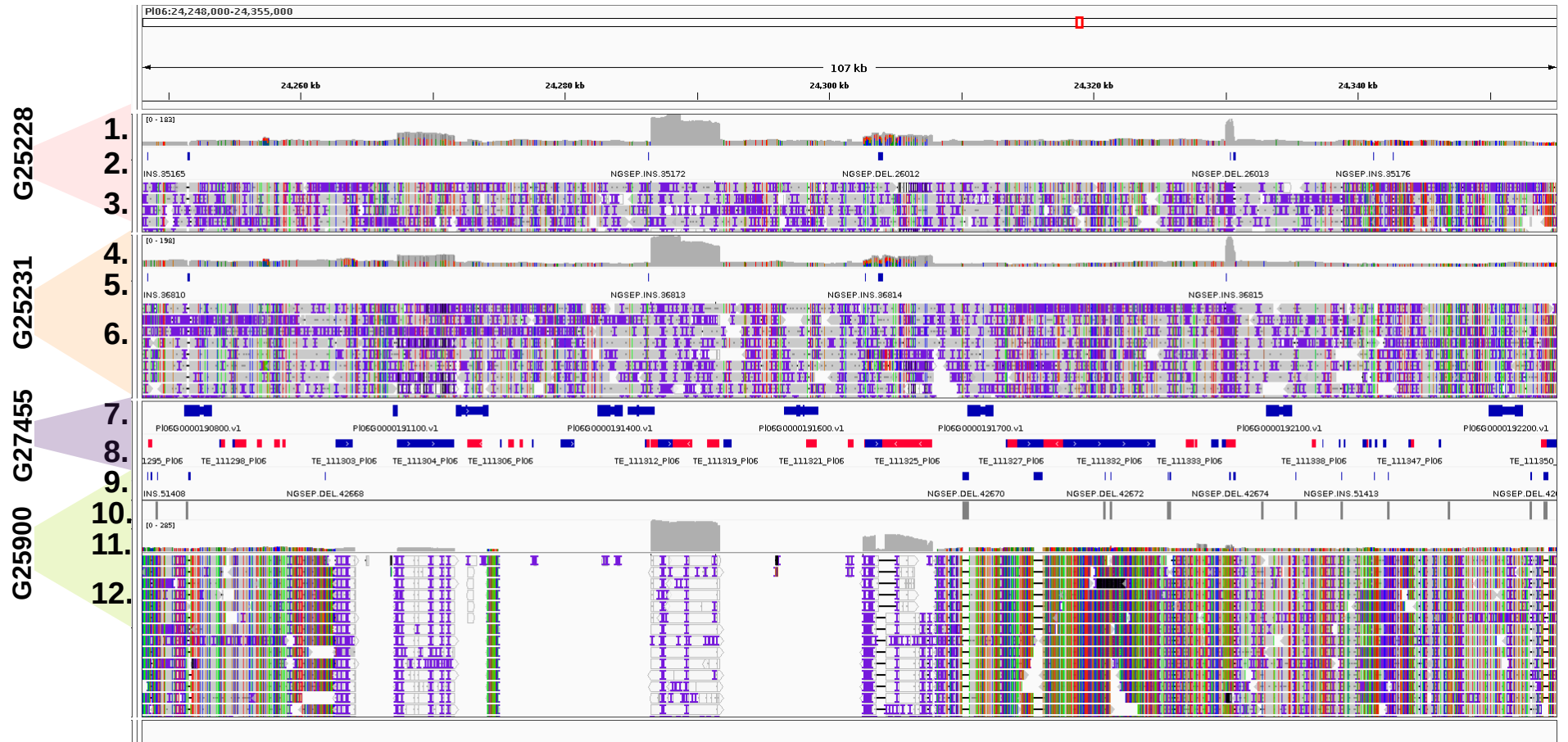
-Deletion of 7131 bp in G25900 at 1 Kbp upstream.

-Insertion in G25900 at 500 bp in the upstream in PI06G0000187600.



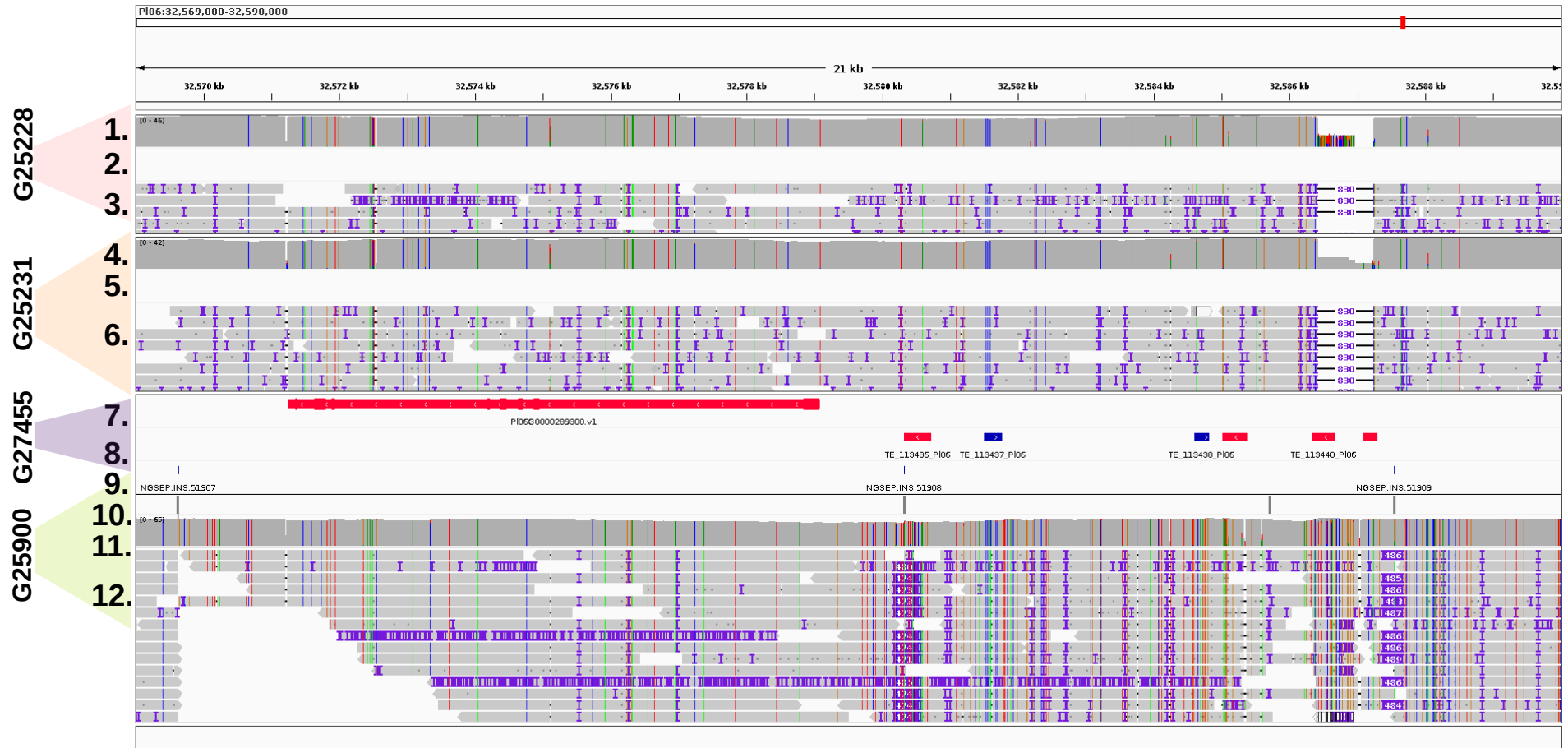
PI06G0000191400.v1 /PI06G0000191700.v1 (CYP79A2)

- TE activity upstream and downstream.
- Insertion in G25231 and G25228 in PI06G0000191400.
- Deletion in G25900 in the 5UTR region in PI06G0000191700.



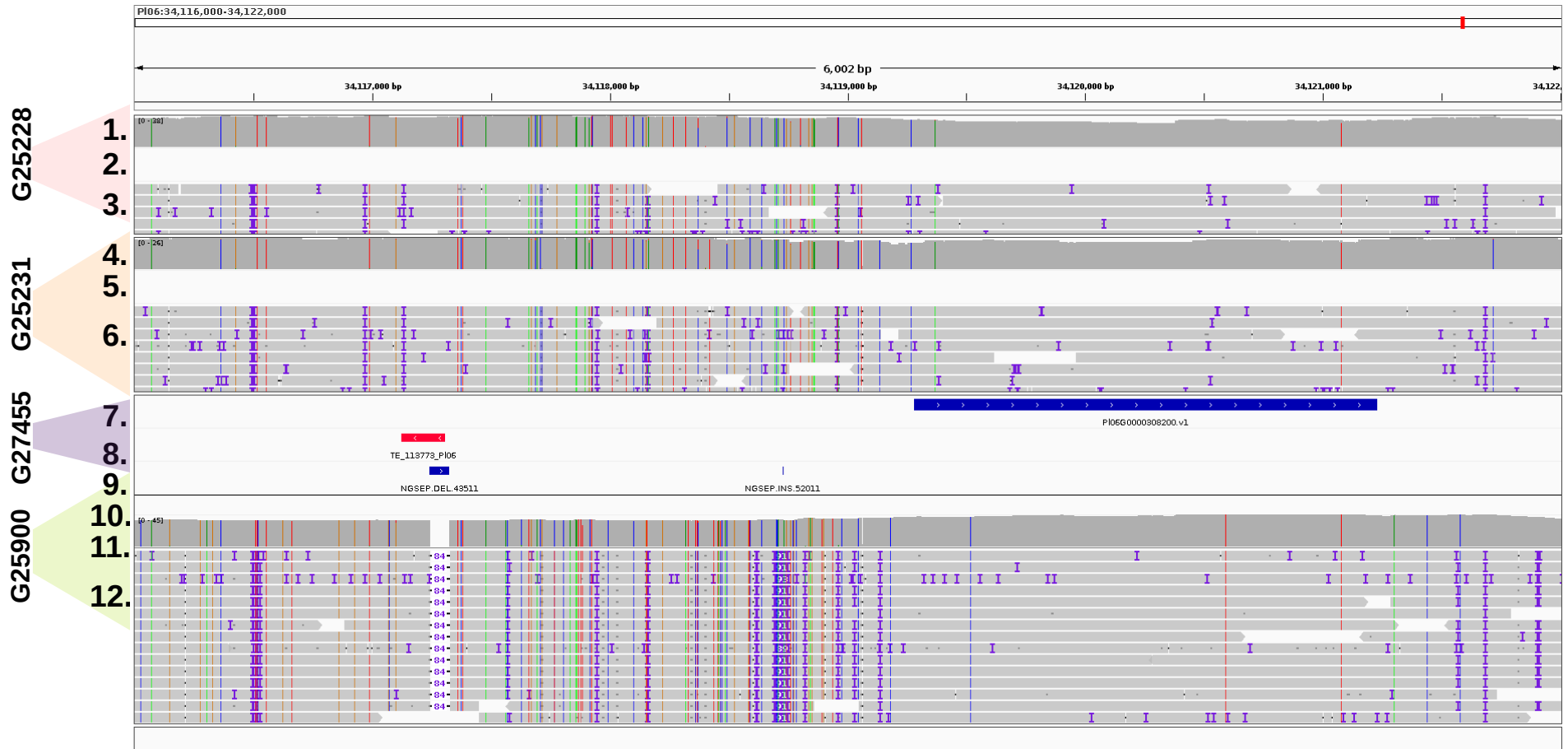
PI06G0000289300.v1 (SHP)

- Insertion of 474 pb in G25900 at 1 Kbp upstream.
- Deletion of 830 bp in G25231 and G25228 at 7 Kb upstream.



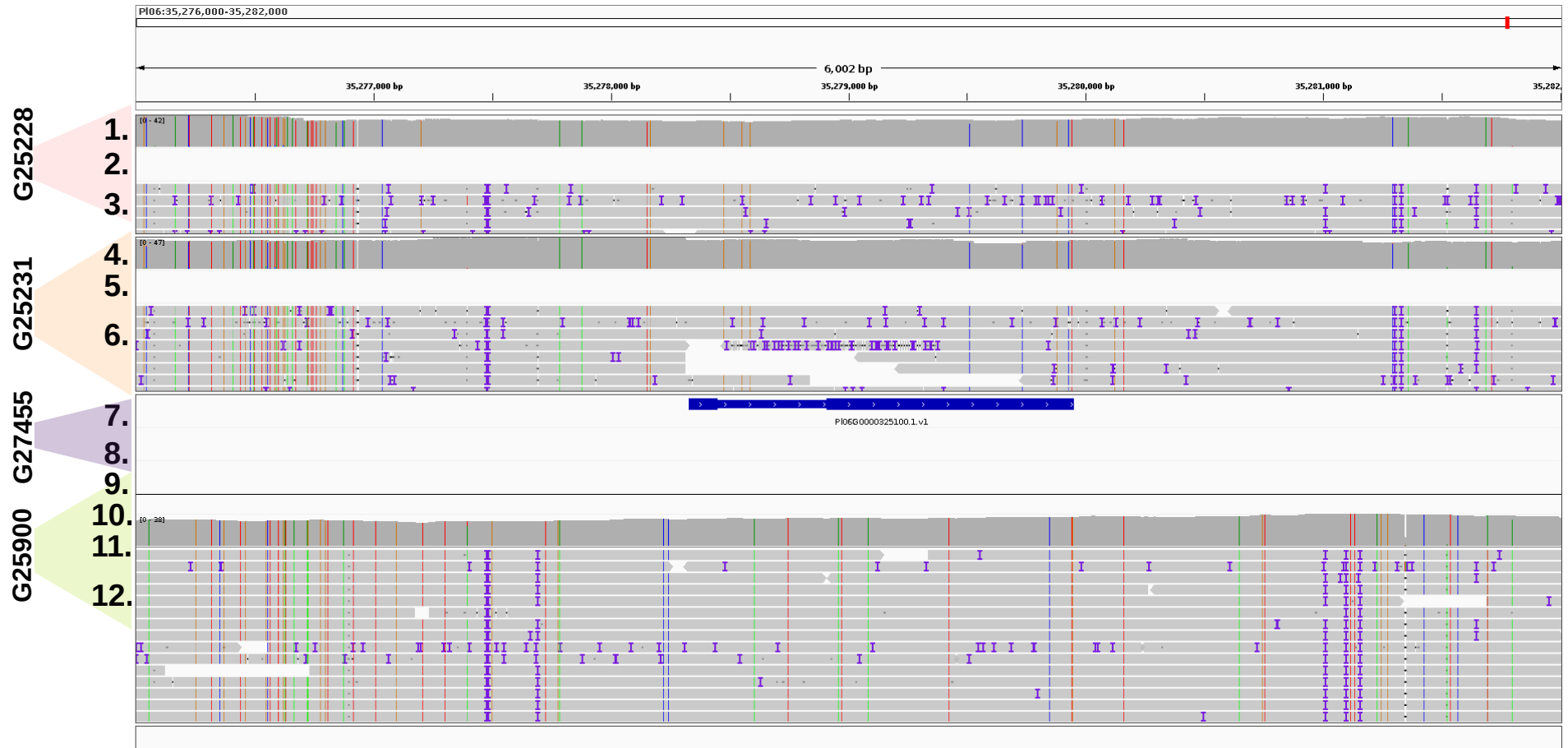
PI06G0000308200.v1 (AHAS)

- Deletion in G25900 of 84 bp at 2.5 Kbp upstream.
- Insertion in G25900 of 91 bp at 1 Kbp upstream.



PI06G0000325100.v1 (SAC51)

-Conserved region.

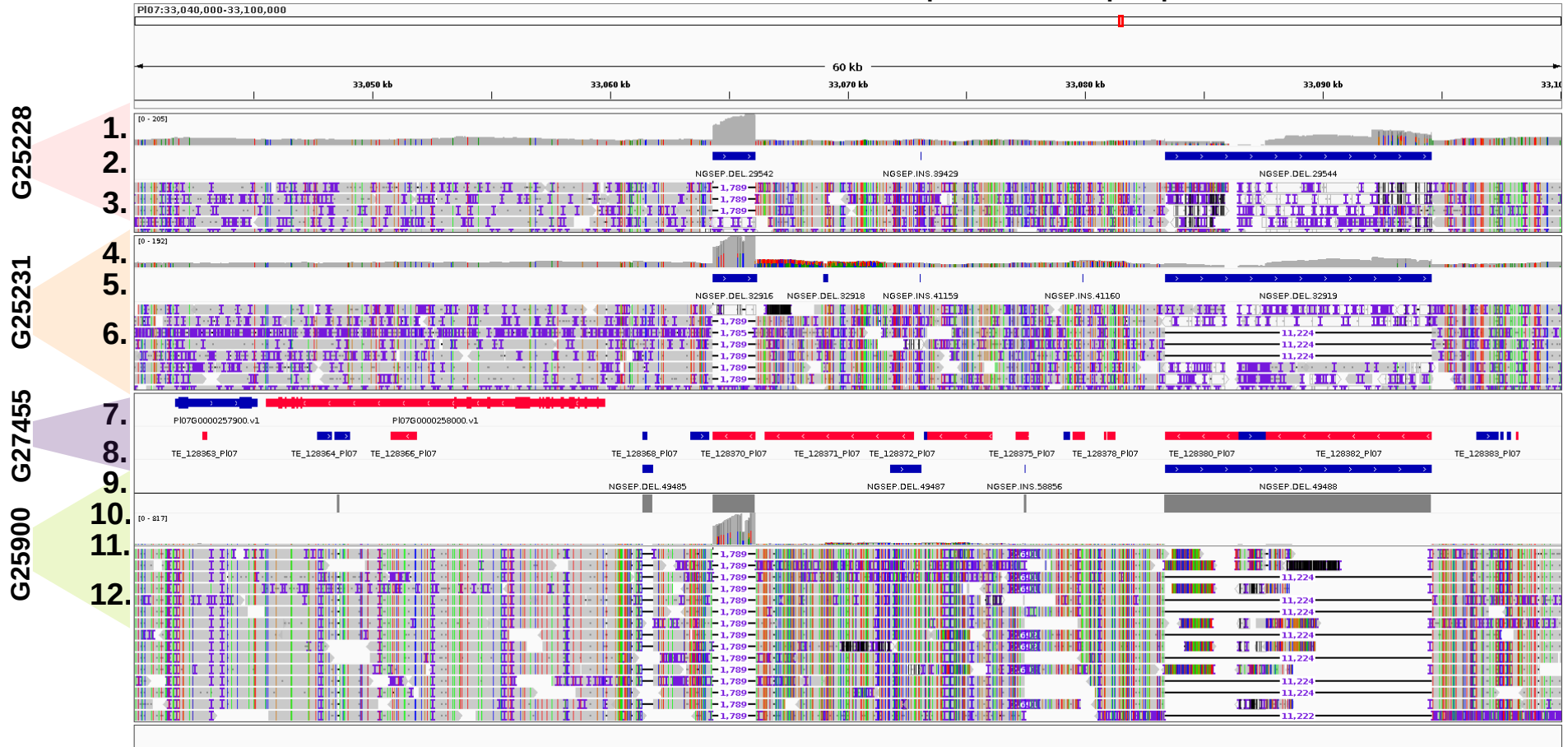


- Deletion in G25900 of 7931 bp at 4 kbp downstream.
- Deletion in G25900 of 6312 bp at 3 kbp downstream.



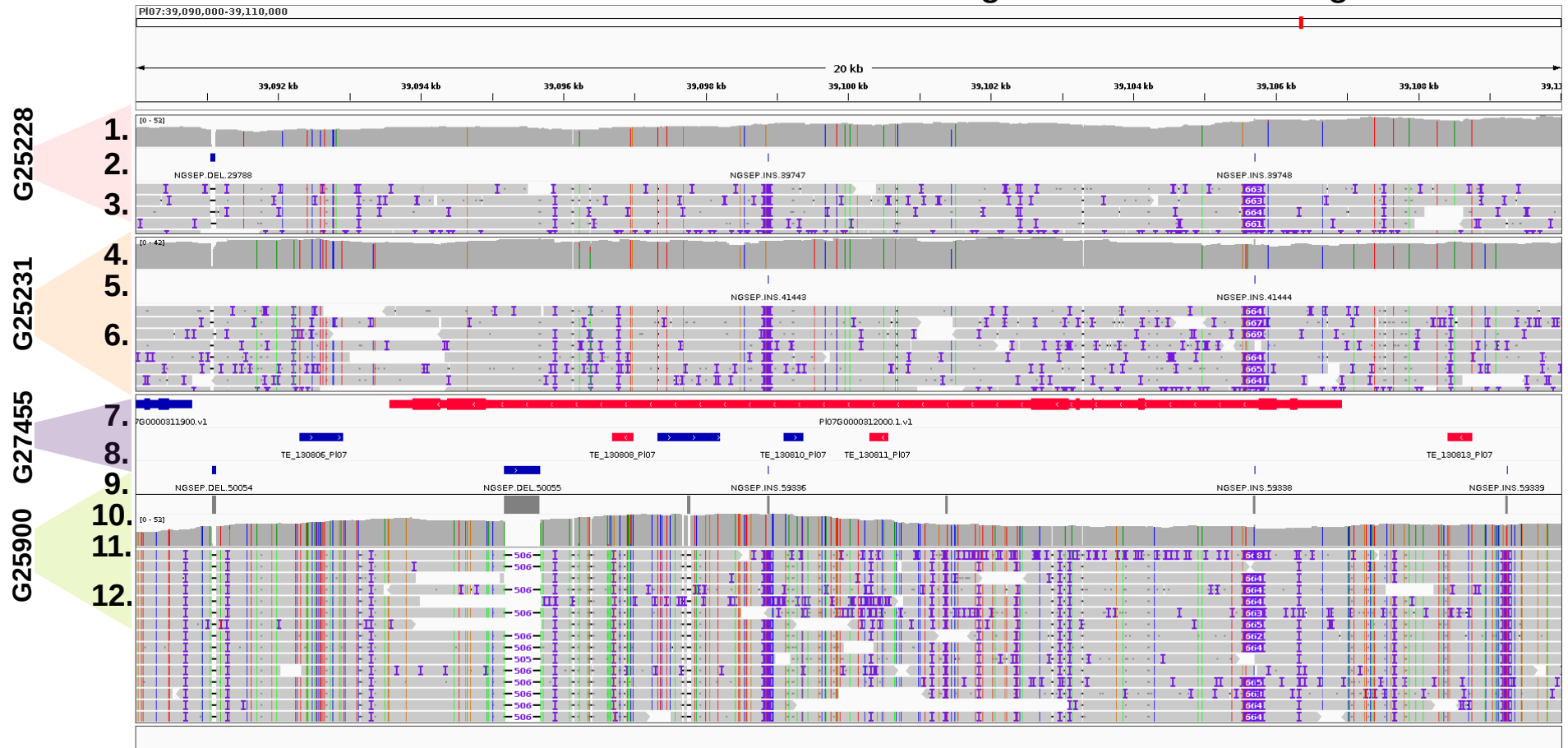
PI07G0000258000.v1 (SWINGER)

- Deletion in G25228, G25231 and G25900 of 1789 bp at 5 Kbp upstream.
- Deletion in G25900 at 500 bp upstream.
- Deletion in G25228, G25231 and G25900 of 11224 bp at 23 Kbp upstream.



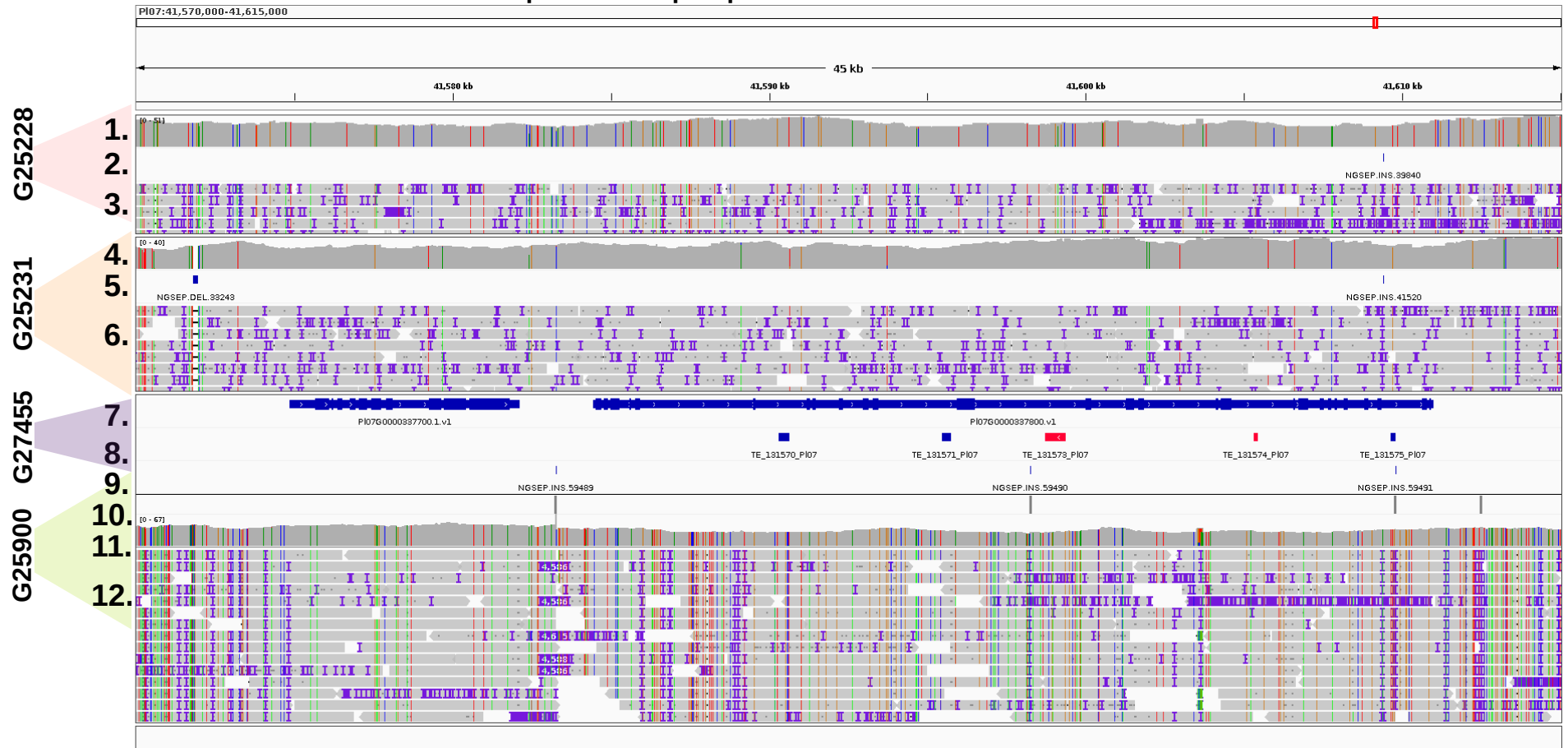
PI07G0000312000.v1 (P Locus)

- Deletion in G25900 of 506 bp within the gene.
- Insertion in G25228, G25231 and G25900 in the second exon of the P Locus gene.
- Insertion in G25228, G25231 and G25900 in the intro region of the P Locus gene.



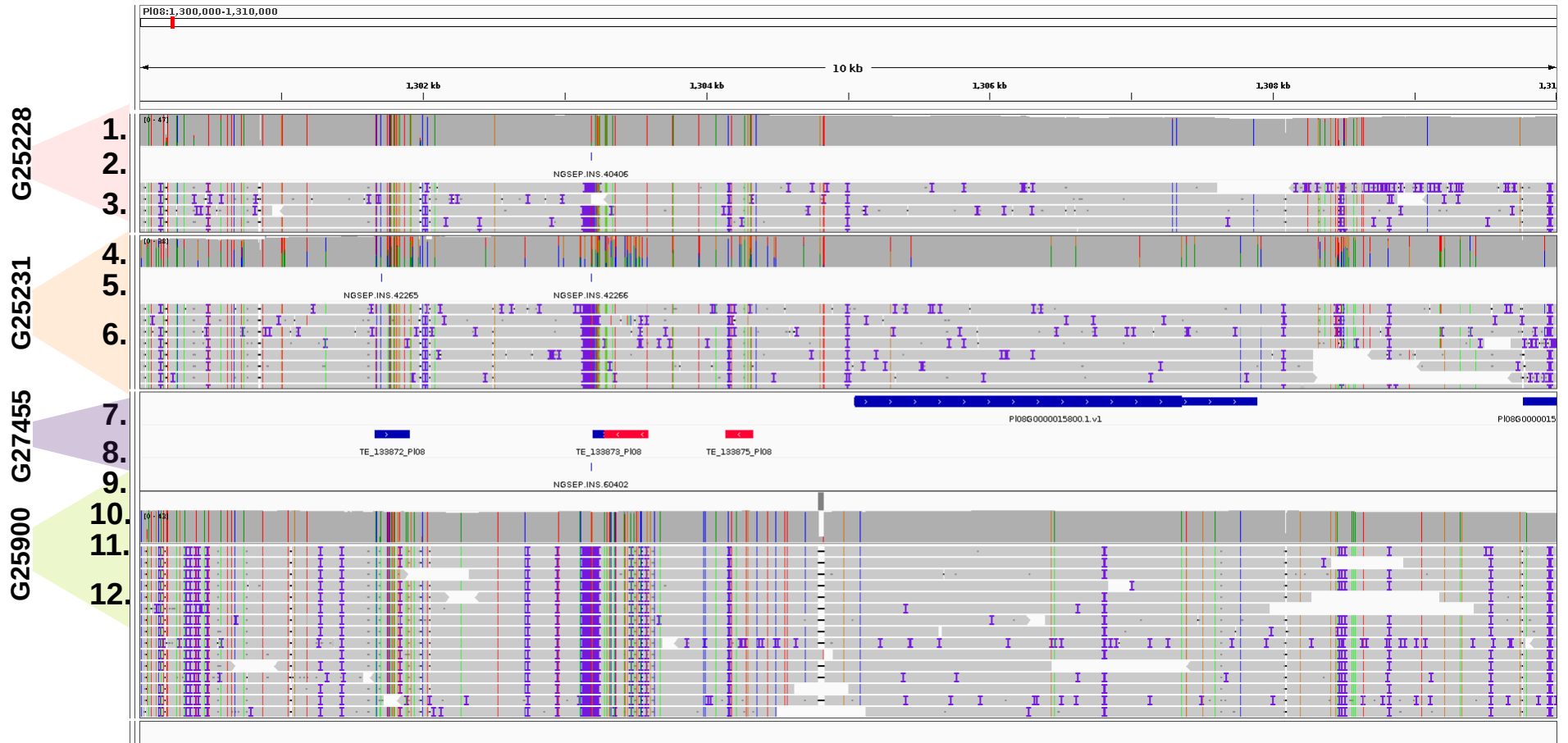
PI07G0000337800.v1 (SAR1)

- Insertion in G25900 in the intron region.
- Insertion in G25228 and G25231 in the intro region.
- Insertion in G25900 of 4586 bp at 1Kbp upstream.



PI08G0000015800.v1 (SBT1.1)

-Insertion in G25228, G25231 and G25900 at 2 kbp upstream.



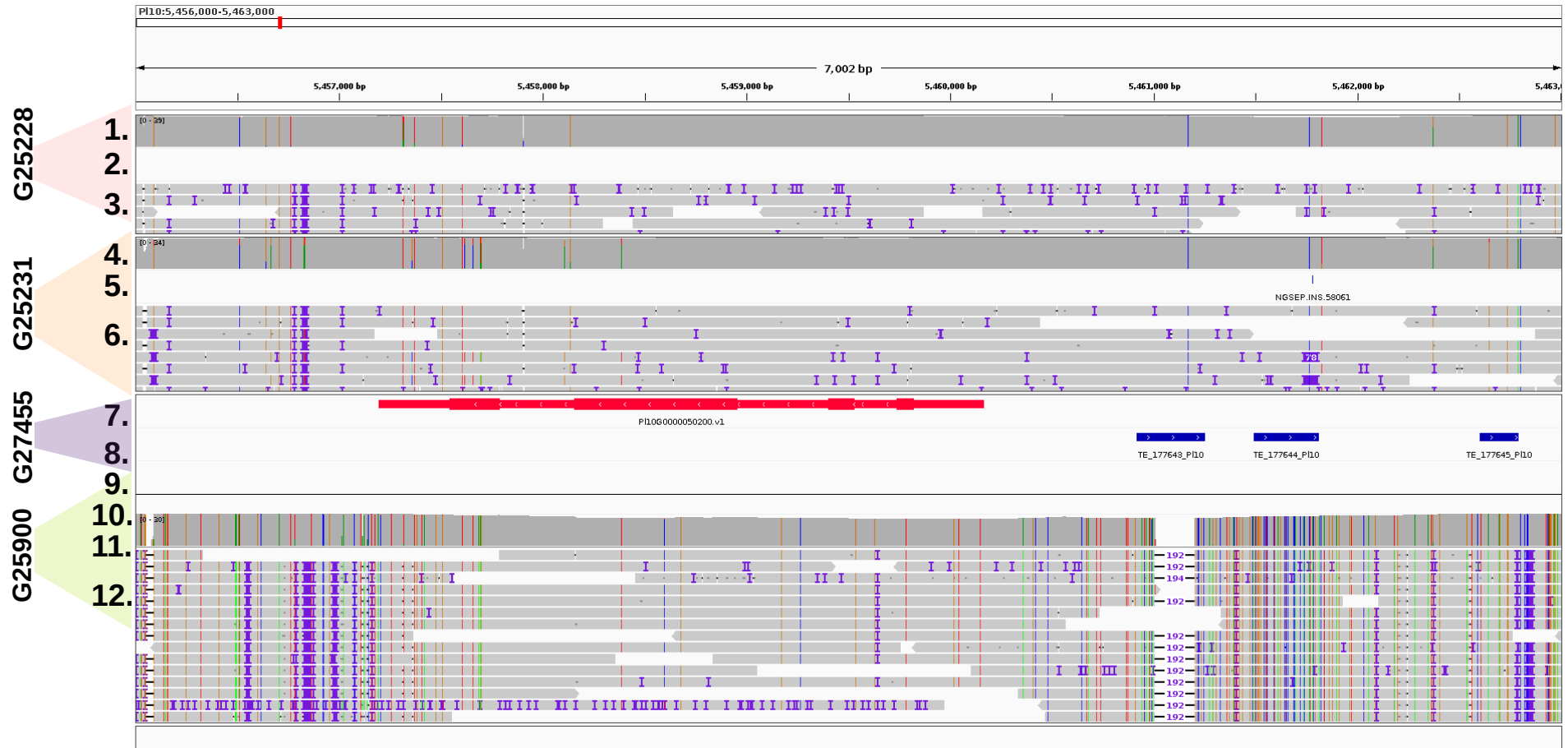
PI09G0000292600.v1 (FUL)

- Deletion in G25231 and G25900 of 903 bp at 3 Kbp upstream.
- Deletion in G25228, G25231 and G25900 of 2060 bp at 2 Kbp downstream.
- Insertion in G25231 and G25228 in the intro region.



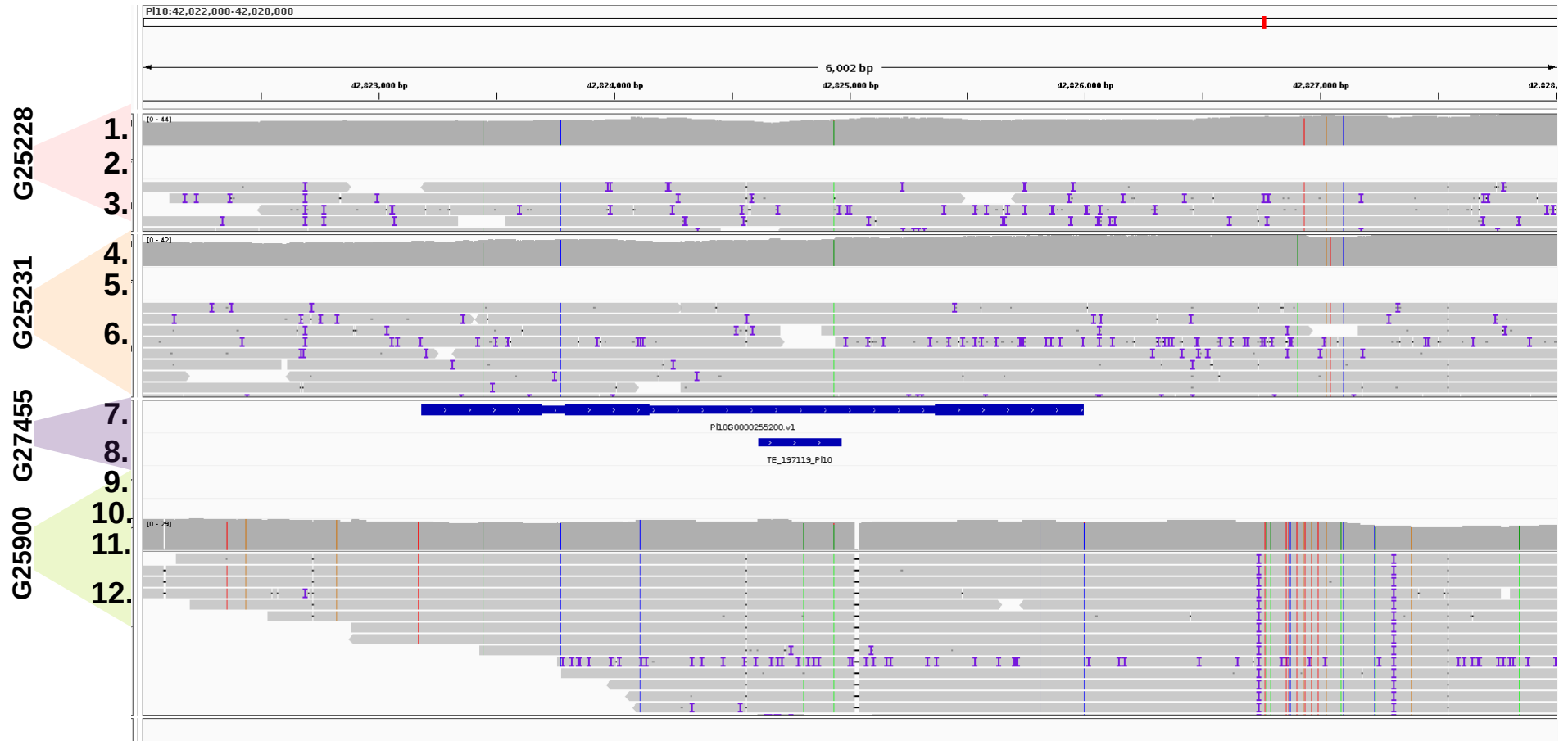
PI10G0000050200.v1 (AMY1)

-Deletion in G25900 of 192 bp at 700 bp upstream.



PI10G0000255200.v1 (CYP79D71)

-Conserved region.



PI10G0000258900.v1 (CYP79D71) / PI10G0000260500.v1 (CYP83E47)

- TE activity upstream and downstream.
- Deletion in G25900 in the PI10G0000258900 gene.
- Insertion downstream in G25900, G25231 and G25228 in PI10G0000260500.



PI10G0000310600.v1 (NST)

-Insertion in G25900 at 1 kbp

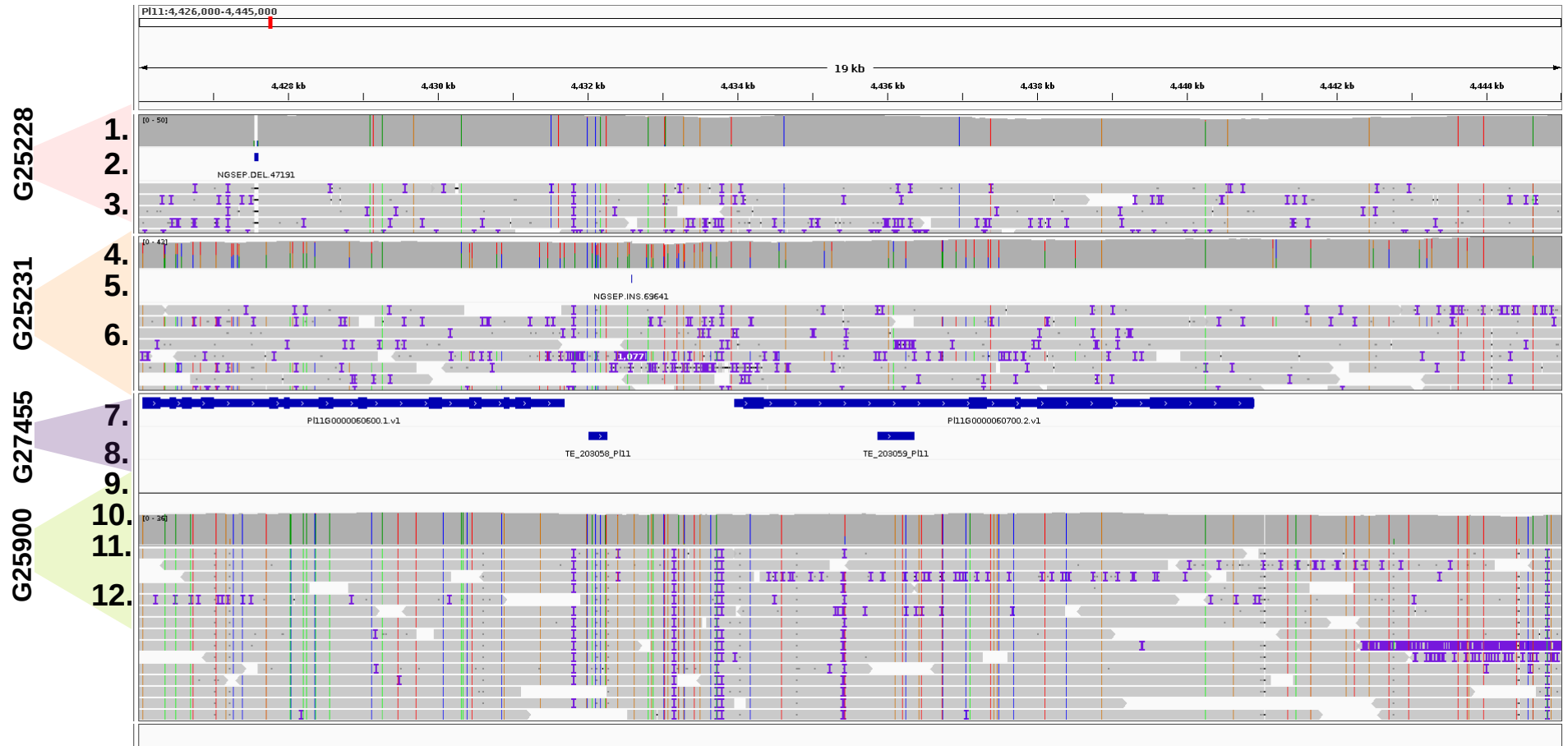


- Insertion in G25900 upstream in TOR
- Deletion in G25900, G25231 and G25228 of 9275 bp



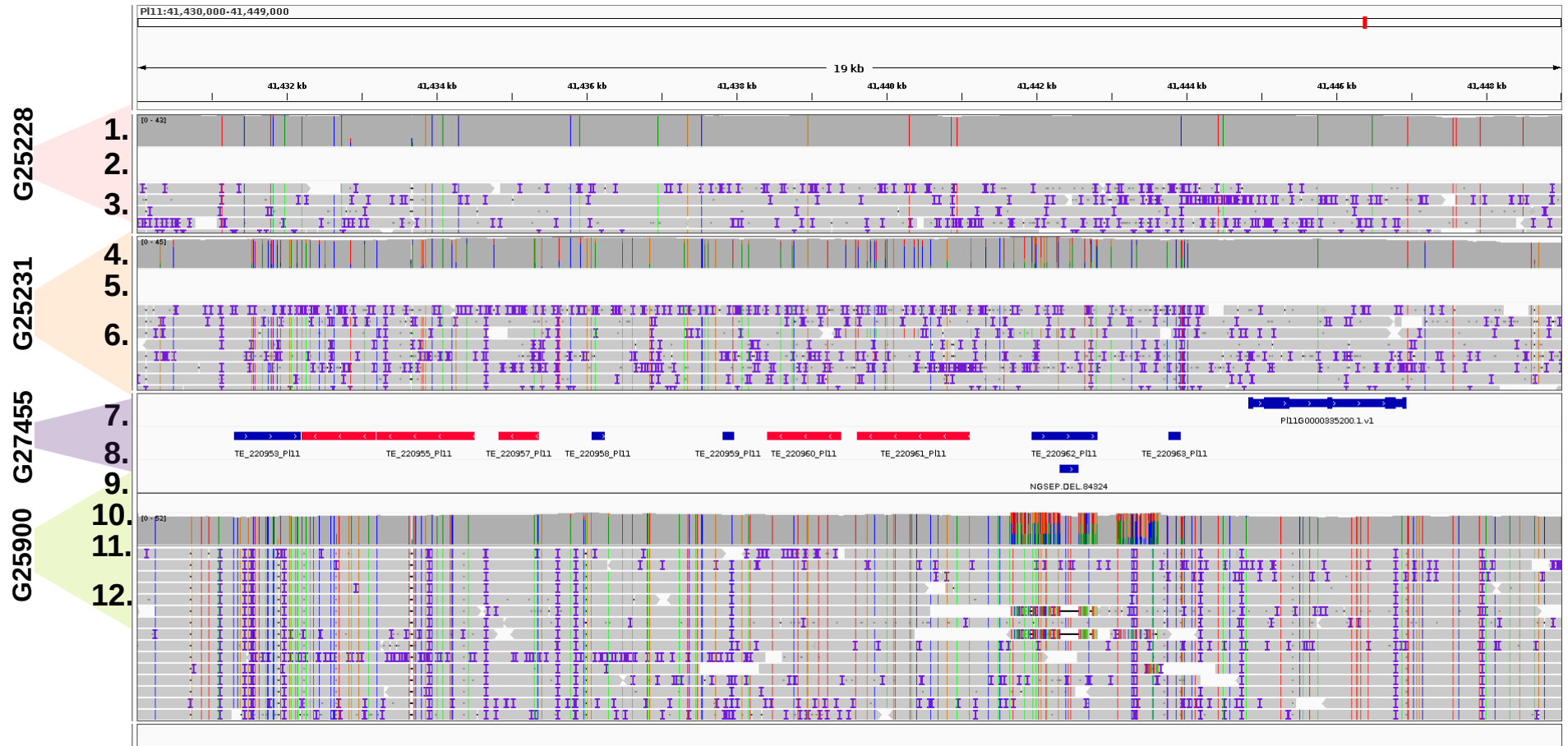
PI11G0000060700.v1 (FPA)

-Conserved region.



PI11G0000335200.v1 (SHL)

-Deletion in G25900 upstream region at 2 kbp



PI11G0000342900.v1 (SPL4)

- Deletion in G25900, G25231 and G25228 of 2278 bp at 9 kbp.
- Deletion in G25900, G25231 and G25228 of 1495 bp at 5 kbp.

