

## HLA-G typing including 3' UTR polymorphisms

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### HLA-G and 3'UTR polymorphisms

The HLA-G 3' UTR presents several polymorphisms that influence mRNA stability and microRNA binding capacity. As a result, some of the 3' UTR polymorphisms have been associated with variations in HLA-G expression profiles.

These differential expression levels are of great importance, as they have been found to influence the outcome of maternal-fetal tolerance, allograft acceptance, and cancer.

### NGSgo-AmpX HLA-G whole gene

GenDx has developed an amplification strategy supporting whole-gene sequencing of HLA-G, including the polymorphisms in the 3' UTR.

Advantages:

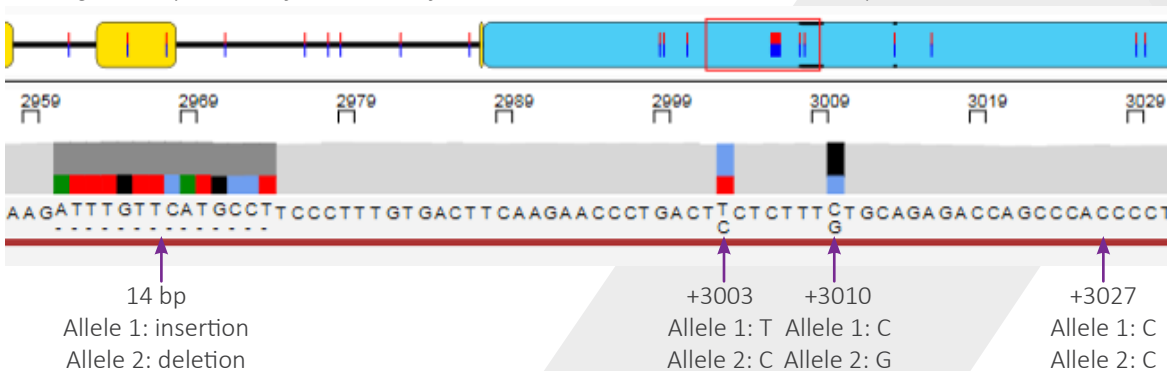
- Perform HLA-G genotyping at high-to-allelic resolution
- Determine the 14-base pair insertion/deletion at position +2961
- Sequence the widely studied Single Nucleotide Polymorphisms (SNPs) at positions +3001 (C/T), +3003 (T/C), +3010 (G/C), +3027 (C/A), +3035 (C/T), +3142 (G/C), +3187 (G/A) and +3196 (C/G).
- Sequence as far downstream as SNP +3509 (G/T).



### Accurate HLA-G typing with NGSengine

You can process the HLA-G amplicons in the NGSgo® Workflow and sequence on Illumina or Ion Torrent platforms. The HLA typing software NGSengine provides fast and accurate HLA-G genotyping results, and includes a dedicated 3' UTR extension on the IMGT/HLA database, designed to determine the polymorphisms.

NGSengine analysis view of the 3' UTR of a HLAG\*01:01:02:01,\*01:01:01:05 sample.



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