TEST: **HLA DQ ALPHA (DQα-1)**

**PRINCIPLE:**
The Human Leukocyte Antigen Class II (HLA D) genes are located on chromosome 6. The HLA D genes are organized into three regions: HLA DR, DQ and DP each of which encodes an alpha and beta glycoprotein. The complete DNA sequence of the HLA DQα alleles is known.

The DQα alleles are detected Next Generation Sequencing (NGS) technologies. With NGS the targeted nucleotide sequence of each loci is determined and then matched to HLA database (IMGT) to produce ultra-high resolution HLA typing. Therefore, typing with NGS substantially decreases ambiguity rates when compared to other current methods (SSO & SSP).

**SPECIMEN REQUIREMENTS:**
10mL whole blood collected in lavender top EDTA tubes (two 5ml tubes). Specimen should be delivered to the laboratory within 72 hours at room temperature. Peripheral blood specimens that are clotted, have not been collected in EDTA, or frozen are not acceptable.

**METHOD:**

Next Generation Sequencing

**REFERENCES:**


3. Puregene DNA Purification System, Genomic DNA Purification kit instruction by Gentra System of Minneapolis, MN.

**Normal Range:** See lab report

**Turnaround Time:** 10 business days