

ScisGo HLA v6

Phased 3-field HLA typing in a single assay using proven Scisco Genetics technology and the GeMS analysis software suite.

Highlights

- Class I HLA -A, -B, -C exons 1-7
- Class II HLA-DRB1345, HLA-DQA1, HLA-DQB1, HLA-DPA1, and HLA-DPB1 exons 1-4
- Phased 3-field typing across all loci
- All known null alleles detected
- Simple, PCR-only protocol
- No robotics
- Total DNA input as low as 10 ng
- DNA from a variety of sources including saliva, buccal swabs, and dried blood spots
- DNA to Data in 30 hours

Overview

The human leukocyte antigens (HLA) are intimately involved in the innate and adaptive immune responses, communicating normal and abnormal cellular status to surveying immune cells. These highly polymorphic genes can greatly affect the outcome of hematopoietic cell and solid organ transplantation, in addition to their consequential roles in infectious disease, autoimmunity, and cancer.

Our NGS solution for HLA class I and II typing is carried out via multiplex PCR of HLA specific amplicons. Exon and flanking intron sequences from the HLA genes are amplified in 4 reactions, simultaneously tagged with index sequences (to distinguish samples), pooled, and sequenced. Data can be stored and analyzed on the cloud and derivative typing data visualized on your desktop computer.

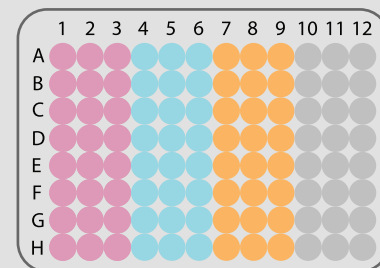
1. Stage 1 PCR

Add DNA and master mix to pre-plated amplicon primer mixes.

2. Stage 2 PCR

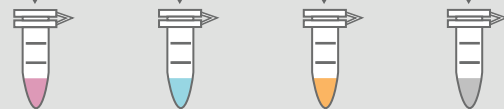
Add secondary master mix.

No plate transfer



3. Pool and Purify

Combine all reactions for each amp and column purify.



4. Quantify and Pool

Combine pools for sequencing.



5. NGS Sequencing



6. Analysis and Reporting

