

What is Human Leukocyte Antigen (HLA)?

Human Leukocyte Antigen, also known as Major Histocompatibility Complex (MHC) in non-human vertebrates, is a set of genes that encode for cell surface molecules that help control a major part of the immune system. The main function of HLA molecules is to bind to peptide fragments derived from foreign pathogens, sometimes cancer cells, and display them on the cell surface for recognition by the appropriate T-cells for destruction. HLA molecules facilitate the interactions of leukocytes, also called white blood cells (WBCs), with other leukocytes or with body cells to help determine “self” vs. “non-self”.

Why is HLA Genotyping Important?

Since HLA is a key component of the immune system, it is becoming recognized that HLA types can affect drug sensitivity, vaccine effectiveness, and resistance to certain viruses. HLA typing is becoming an increasingly important aspect of many new immunotherapies, specifically T-cell and antibody directed therapies, as well as many other forms of personalized medicine.

HLA Genotyping Methods

Intermediate Resolution

Class I: Exons 2,3; Class II: Exon 2; Alpha-numeric reporting format with code translation.

Example = A*02: TSXZ, 03:ABSAX

ARS (Antigen Recognition Site) Resolution - NGS

Class I: Exons 2,3, Class II: Exon 2- complete coverage. Resolves all ambiguities within ARS.

Example = A*02:01:01G, 31:01:02G

* Customized Resolutions Available Upon Request. Please Contact for More Options.

* Pricing Based on Number of Loci Typed and Resolution.

HLA Typed Healthy Donors

Prospective Whole Blood Collection

Conversant Bio has established a large and diverse donor base comprised of healthy donors using robust, high-resolution, NGS methods. These characterized donors are readily available for prospective recruitment, and they are eager to participate in cutting-edge research. Customized collection, processing, and isolation protocols are welcome.

Peripheral Blood Mononuclear Cells (PBMCs)

In order to more easily and quickly find the perfect controls for your study, Conversant Bio has a bank of readily available PBMCs from HLA Typed healthy donors. In addition, a vast selection of unique immunology, hematology, and oncology PBMCs, including some from patients treated with anti-PD-L1 therapies, are available for additional HLA Screening.

Mononuclear cells, mainly consisting of monocytes and lymphocytes, are obtained by gradient centrifugation using Ficoll. These cells are aliquotted and cryopreserved at -150C in a manner that maintains high post-thaw viability.



Take Your Research Further. Faster.
Inquire about Pricing & Availability at sales@conversantbio.com

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