UCLA Division of Transfusion Medicine Blood & Platelet Center Los Angeles, CA 90024

HLA Antibody Educational Material

What is HLA?

HLA stands for Human Leukocyte Antigen. HLA antigens are proteins found on most cells in your body. These antigens are inherited as a unique set from your parents. They allow for the regulation of your immune system.

What is an antibody?

Antibodies are proteins that are found in your plasma (the liquid portion of your blood). Your cells make antibodies in response to antigens on cells that are different from your own and foreign targets such as viruses and bacteria. Antibodies play a key role in the immune system. HLA antibodies are commonly formed in women during pregnancy, after receiving a blood transfusion or organ transplant. HLA antibodies pose absolutely no risk to you. However, HLA antibodies in donated plasma or plasma blood products may be dangerous to transfusion recipients.

Are HLA antibodies harmful?

HLA antibodies are not harmful to the person who made them. Your HLA antibodies pose absolutely no risk to you. However, if transfused to another person HLA antibodies can cause a rare but very serious complication in the transfusion recipients known as Transfusion-Related Acute Lung Injury (TRALI). This complication is seen most frequently following transfusion of plasma or plasma blood products, such as platelets collected by apheresis.

How is blood tested for HLA antibodies?

A small sample of your blood is separated into cellular and liquids portions. The plasma or liquid portion is mixed with different HLA antigens. If there are HLA antibodies in the plasma they will react with the HLA antigens and give a positive result.

What should I do if I test positive for HLA Antibody?

You do not need to do anything if you test positive for HLA antibodies. Your HLA antibodies pose absolutely no risk to you. You will remain eligible to donate red blood cells. Unfortunately, you will no longer be eligible to donate plasma or plasma blood products, such as platelets collected by apheresis.