

### Synonym

HLA-G, HLA class I histocompatibility antigen, alpha chain G, HLAG, HLA-6.0

### Source

Human HLA-G protein, His Tag(HLG-H51H3) is expressed from E. coli cells. It contains AA Gly 25 - Ala 206 (Accession # P17693-1).

Predicted N-terminus: Met

#### **Molecular Characterization**

HLA-G(Gly 25 - Ala 206) P17693-1

Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 23 kDa. The protein migrates as 23-26 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE).

#### **Endotoxin**

Less than 1.0 EU per µg by the LAL method.

## **Purity**

>90% as determined by SDS-PAGE.

### **Formulation**

Lyophilized from 0.22  $\mu m$  filtered solution in PBS, 0.5 M Arginine, 0.5 M NaCl, pH 7.3 with trehalose as protectant.

Contact us for customized product form or formulation.

#### Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

#### **Storage**

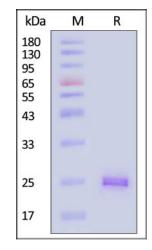
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

## **SDS-PAGE**



Human HLA-G protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

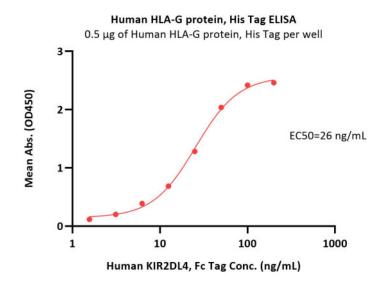
# **Bioactivity-ELISA**

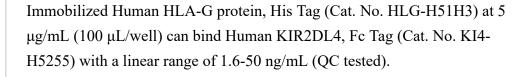


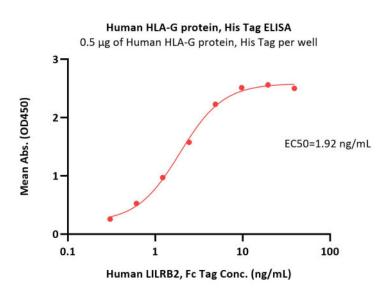
# **Human HLA-G protein, His Tag**

Catalog # HLG-H51H3









Immobilized Human HLA-G protein, His Tag (Cat. No. HLG-H51H3) at 5  $\mu$ g/mL (100  $\mu$ L/well) can bind Human LILRB2, Fc Tag (Cat. No. LI2-H5253) with a linear range of 0.3-2 ng/mL (Routinely tested).

## Background

Human leukocyte antigen-G (HLA-G) is a group of closely linked genes located on the short arm of human chromosome 6. Hla-g belongs to a non-classical major histocompatibility complex. MHC class I molecules are selectively highly expressed in extravvillous trophoblast cells invading the uterine decidual membrane. The gene structure of HLA-G is similar to that of HLA-A,HLA-B and HLA-C, but the termination code appears in advance so that the intracellular segment of protein product encoded by HLA-G is only 6 amino acids, which is significantly shorter than the 30 amino acids of classical HLA classI antigen. The Human HLA-G & B2M & RIIPRHLQL Complex Protein is a complex of HLA-G of the MHC Class I, B2M and RMFPNAPYL peptide.

## **Clinical and Translational Updates**

