

**Biotin Mouse Anti-human HLA-G Antibody**  
**\*87G, monoclonal, Cross Adsorbed\***Catalog number: V1031175  
Unit size: 0.1 mg**Product Details**

|                    |                                                                             |
|--------------------|-----------------------------------------------------------------------------|
| Storage Conditions | 2-8°C with minimized light exposure. Do not freeze.                         |
| Expiration Date    | 12 months upon receiving                                                    |
| Concentration      | Lot specific (please consult certificate of analysis for given lot)         |
| Formulation        | Phosphate-buffered saline (PBS, pH 7.2), 15 mM sodium azide, 0.2% (w/v) BSA |

**Antibody Properties**

|                    |            |
|--------------------|------------|
| Species Reactivity | Human      |
| Class              | Primary    |
| Clonality          | Monoclonal |
| Host               | Mouse      |
| Immunogen          | HLA-G      |
| Clone              | 87G        |
| Conjugate          | Biotin     |

**Biological Properties**

|             |                                                                                                                                                |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Preparation | Antibody purified by affinity chromatography, cross-adsorbed against mouse, rat serum and then conjugated with Biotin under optimal conditions |
| Application | FC (QC TESTED), IHC(F), ELISA                                                                                                                  |

**Applications**

HLA class I histocompatibility antigen,  $\alpha$  chain G is a 38 kDa transmembrane protein that can be found in the recycling endosome membrane, filopodium membrane and early endosome membrane of cells. It is alternatively called HLA G antigen and MHC class I antigen G. In humans, HLA G antigen acts to positively regulate natural killer cell cytokine production, cellular senescence and macrophage cytokine production while also represses G0 to G1 transition, angiogenesis and protein kinase B signaling. Sequencing of HLA G antigen has supported it contains 3 types of conserved structural units: Ig-like C1-type, cytoplasmic and extracellular domain. HLA G is the subject of extensive research stemming from the fact that it is involved with the immune response-inhibiting cell surface receptor signaling pathway, type I interferon signaling pathway and interferon- $\gamma$ -mediated signaling pathway. It has been thought to be involved with important functions such as protein homodimerization activity. HLA G antigen binds with CD8 receptor, identical protein and signaling receptor. It is an integral part of organismal processes, for example, peripheral B cell tolerance induction, cellular defense response and protection from natural killer cell mediated cytotoxicity, and also, takes part in processes such as immune response.