

**Purified Mouse Anti-human HLA-G Antibody**  
**\*2A12, monoclonal\***Catalog number: V1031125  
Unit size: 0.1 mg**Product Details**

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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**

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Species Reactivity	Human
Class	Primary
Clonality	Monoclonal
Host	Mouse
Immunogen	HLA-G
Clone	2A12

**Biological Properties**

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Preparation	Antibody purified by affinity chromatography and then conjugated with under optimal conditions
Application	FC (QC TESTED), WB, IHC(P), IHC(F), ELISA

**Applications**

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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.