

# HLA-G monoclonal antibody, clone 87G (FITC)

Catalog # MAB5093

Size 100 ug

## Specification

|                            |                                                                                                                                                                   |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Description</b> | Mouse monoclonal antibody raised against HLA-G.                                                                                                                   |
| <b>Immunogen</b>           | HLA-B27 transgenic mice were immunized with H-2 identical murine cells transfected with and expressing genes encoding HLA-G and human beta2-microglobulin.        |
| <b>Host</b>                | Mouse                                                                                                                                                             |
| <b>Reactivity</b>          | Human                                                                                                                                                             |
| <b>Specificity</b>         | This antibody recognizes both membrane-bound and soluble forms of HLA-G (HLA-G1 and HLA-G5). This antibody blocks interaction of HLA-G with inhibitory receptors. |
| <b>Form</b>                | Liquid                                                                                                                                                            |
| <b>Conjugation</b>         | FITC                                                                                                                                                              |
| <b>Concentration</b>       | 1 mg/mL                                                                                                                                                           |
| <b>Isotype</b>             | IgG2a                                                                                                                                                             |
| <b>Recommend Usage</b>     | Flow Cytometry (1:100)<br>The optimal working dilution should be determined by the end user.                                                                      |
| <b>Storage Buffer</b>      | In PBS, pH 7.4 (0.09% sodium azide)                                                                                                                               |
| <b>Storage Instruction</b> | Store in the dark at 4°C. Do not freeze.<br>Avoid prolonged exposure to light.<br>Aliquot to avoid repeated freezing and thawing.                                 |
| <b>Note</b>                | This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.                                            |

## Applications

- Flow Cytometry

## Gene Info — HLA-G

|                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
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| Entrez GeneID      | <a href="#">3135</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Gene Name          | HLA-G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Gene Alias         | MHC-G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Gene Description   | major histocompatibility complex, class I, G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Omim ID            | <a href="#">142871 600807</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Gene Ontology      | <a href="#">Hyperlink</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Gene Summary       | HLA-G belongs to the HLA class I heavy chain paralogues. This class I molecule is a heterodimer consisting of a heavy chain and a light chain (beta-2 microglobulin). The heavy chain is anchored in the membrane. HLA-G is expressed on fetal derived placental cells. The heavy chain is approximately 45 kDa and its gene contains 8 exons. Exon one encodes the leader peptide, exons 2 and 3 encode the alpha1 and alpha2 domain, which both bind the peptide, exon 4 encodes the alpha3 domain, exon 5 encodes the transmembrane region, and exon 6 encodes the cytoplasmic tail. [provided by RefSeq] |
| Other Designations | HLA class I molecule HLA-G histocompatibility antigen, class I, G MHC class I antigen OTTHUMP00000039485 b2 microglobulin                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

## Publication Reference

- [Immune regulation by pretenders: cell-to-cell transfers of HLA-G make effector T cells act as regulatory cells.](#)  
 LeMaoult J, Caumartin J, Daouya M, Favier B, Le Rond S, Gonzalez A, Carosella ED.  
 Blood 2006 Oct; 109(5):2040.
- [The surface expression of HLA-F on decidual trophoblasts increases from mid to term gestation.](#)  
 Shobu T, Sageshima N, Tokui H, Omura M, Saito K, Nagatsuka Y, Nakanishi M, Hayashi Y, Hatake K, Ishitani A.  
 Journal of Reproductive Immunology 2006 Jun; 72(1-2):18.
- [HLA-G proteins in cancer: do they provide tumor cells with an escape mechanism?](#)  
 Rouas-Freiss N, Moreau P, Ferrone S, Carosella ED.  
 Cancer Research 2005 Nov; 65(22):10139.

## Pathway

- [Allograft rejection](#)
- [Antigen processing and presentation](#)
- [Autoimmune thyroid disease](#)
- [Cell adhesion molecules \(CAMs\)](#)
- [Endocytosis](#)
- [Graft-versus-host disease](#)
- [Natural killer cell mediated cytotoxicity](#)
- [Type I diabetes mellitus](#)

## Disease

- [Abortion](#)
- [Anemia](#)
- [Arthritis](#)
- [Asthma](#)
- [Autoimmune Diseases](#)
- [Behcet Syndrome](#)
- [Birth Weight](#)
- [Bronchial Hyperreactivity](#)
- [Carcinoma](#)
- [Cardiomyopathy](#)
- [Cardiovascular Diseases](#)
- [Cervical Intraepithelial Neoplasia](#)
- [Cholestasis](#)
- [Chorioamnionitis](#)
- [Colitis](#)
- [Coronary Aneurysm](#)

- [Crohn Disease](#)
- [Cytomegalovirus Infections](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Disease Susceptibility](#)
- [Ductus Arteriosus](#)
- [Eclampsia](#)
- [Edema](#)
- [Fetal Diseases](#)
- [Fetal Membranes](#)
- [Gastrointestinal Diseases](#)
- [Genetic Predisposition to Disease](#)
- [Graft vs Host Disease](#)
- [Hepatitis](#)
- [Hepatitis C](#)
- [HIV Infections](#)
- [Hypersensitivity](#)
- [Infant](#)
- [Infection](#)
- [Infertility](#)
- [Lupus Erythematosus](#)
- [Mucocutaneous Lymph Node Syndrome](#)
- [Multiple Sclerosis](#)
- [Obstetric Labor](#)
- [Papillomavirus Infections](#)

- [Photosensitivity Disorders](#)
- [Pneumonia](#)
- [Pre-Eclampsia](#)
- [Pregnancy Complications](#)
- [Premature Birth](#)
- [Prenatal Exposure Delayed Effects](#)
- [Psoriasis](#)
- [Purpura](#)
- [Sarcoidosis](#)
- [Thalassemia](#)
- [Tobacco Use Disorder](#)
- [Urinary Bladder Neoplasms](#)
- [Uterine Cervical Neoplasms](#)