

HLA-G monoclonal antibody, clone 87G (Biotin)

Catalog # MAB5092

Size 100 ug

Specification

Product Description	Mouse monoclonal antibody raised against HLA-G.
Immunogen	HLA-B27 transgenic mice were immunized with H-2 identical murine cells transfected with and expressing genes encoding HLA-G and human beta2-microglobulin.
Host	Mouse
Reactivity	Human
Specificity	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.
Form	Liquid
Conjugation	Biotin
Isotype	IgG2a
Recommend Usage	Flow Cytometry (1:500) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH 7.4 (0.09% sodium azide)
Storage Instruction	Store at 4°C. Do not freeze. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Flow Cytometry

Gene Info — HLA-G

Entrez GeneID [3135](#)

Gene Name HLA-G

Gene Alias MHC-G

Gene Description major histocompatibility complex, class I, G

Omim ID [142871 600807](#)

Gene Ontology [Hyperlink](#)

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.

Application: IF, IHC-Fr, Human, Human decidual tissues

- [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](#)