

HLA-G monoclonal antibody, clone MEM-G/9 (PE)

Catalog # MAB5059

Size 100 ug

Specification

Product Description	Mouse monoclonal antibody raised against recombinant HLA-G.
Immunogen	Recombinant protein corresponding to human HLA-G refolded with beta2-microglobulin and peptide.
Host	Mouse
Reactivity	Human
Specificity	This antibody reacts with native form of human HLA-G1 on the cell surface as well as with soluble HLA-G5 isoform in its beta2-microglobulin associated form. HLA-G belongs to the MHC Class I molecules (MHC Class Ib; nonclassical) and it is expressed on the surface of trophoblast cells.
Form	Liquid
Conjugation	PE
Concentration	0.1 mg/mL
Isotype	IgG1
Recommend Usage	Flow Cytometry (1:100) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.2% BSA, 0.09% sodium azide)
Storage Instruction	Store in the dark at 4°C. Do not freeze. Avoid prolonged exposure to light. 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

- 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

- [Regulatory role of tryptophan degradation pathway in HLA-G expression by human monocyte-derived dendritic cells.](#)

Lopez AS, Alegre E, LeMaout J, Carosella E, Gonzalez A.

Molecular Immunology 2006 Feb; 43(14):2151.

- [The CD85J/leukocyte inhibitory receptor-1 distinguishes between conformed and beta 2-microglobulin-free HLA-G molecules.](#)

Gonen-Gross T, Achdout H, Arnon TI, Gazit R, Stern N, Horejsi V, Goldman-Wohl D, Yagel S, Mandelboim O.

Journal of Immunology 2005 Oct; 175(8):4866.

- [Characterization of monoclonal antibodies recognizing HLA-G or HLA-E: new tools to analyze the expression of nonclassical HLA class I molecules.](#)

Menier C, Saez B, Horejsi V, Martinuzzi S, Krawice-Radanne I, Bruel S, Le Danff C, Reboul M, Hilgert I, Rabreau M, Larrad ML, Pla M, Carosella ED, Rouas-Freiss N.

Human Immunology 2003 Mar; 64(3):315.

Application: Flow Cyt, Human, LCL, JEG-3, K-562 cells

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](#)