

HLA-G monoclonal antibody, clone 5A6G7 (PE)

Catalog # MAB4489

Size 100 ug

Specification

Product Description	Mouse monoclonal antibody raised against synthetic peptide HLA-G.
Immunogen	A synthetic peptide (conjugated with OVA) corresponding to C-terminus of human soluble HLA-G5 and HLA-G6.
Host	Mouse
Reactivity	Human
Specificity	This antibody allows to discriminate between soluble HLA-G protein yielded by shedding from membrane-bound HLA-G forms that do not contain the intron 4-encoded epitope and soluble HLA-G5/HLA-G6 produced from intron 4-retaining alternatively spliced mRNAs. 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 (10 ug/mL) 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

- Western Blot
- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)
- Immunohistochemistry (Frozen sections)
- Immunocytochemistry
- 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

- [Modulation of HLA-G expression in human neural cells after neurotropic viral infections.](#)

Lafon M, Prehaud C, Megret F, Lafage M, Mouillot G, Roa M, Moreau P, Rouas-Freiss N, Carosella ED.

Journal of Virology 2005 Dec; 79(24):15226.

Application: Flow Cyt, ICC, IF, Human, SK-N-SH/RA cells

- [Indoleamine 2,3 dioxygenase and human leucocyte antigen-G inhibit the T-cell alloproliferative response through two independent pathways.](#)

Le Rond S, Gonzalez A, Gonzalez AS, Carosella ED, Rouas-Freiss N.

Immunology 2005 Nov; 116(3):297.

- [Report of the Wet Workshop for Quantification of Soluble HLA-G in Essen, 2004.](#)

Rebmann V, Lemaoult J, Rouas-Freiss N, Carosella ED, Grosse-Wilde H.

Human Immunology 2005 Aug; 66(8):853.

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](#)