

9F, No. 108, Jhouzih St.,Taipei, Taiwan Tel: + 886-2-8751-1888 Fax: + 886-2-6602-1218 E-mail: sales@abnova.com

## Datasheet

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

Catalog Number: MAB4489

Regulatory Status: For research use only (RUO)

**Product Description:** Mouse monoclonal antibody raised against synthetic peptide HLA-G.

Clone Name: 5A6G7

**Immunogen:** A synthetic peptide (conjugated with OVA) corresponding to C-terminus of human soluble HLA-G5 and HLA-G6.

Host: Mouse

## Reactivity: Human

**Applications:** ELISA, Flow Cyt, ICC, IHC-Fr, IHC-P, WB (See our web site product page for detailed applications information)

**Protocols:** See our web site at http://www.abnova.com/support/protocols.asp or product page for detailed protocols

**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.

Entrez GenelD: 3135

Gene Symbol: HLA-G

Gene Alias: MHC-G

**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]

## **References:**

1. 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. J Virol. 2005 Dec;79(24):15226-37.

2. 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):297-307.

3. 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. Hum Immunol. 2005 Aug;66(8):853-63. Epub 2005 Jul 20.