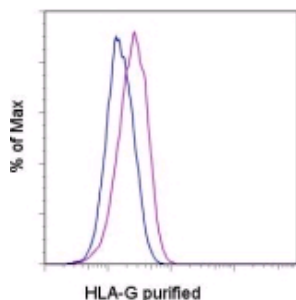


## Anti-Human HLA-G Purified

Catalog Number: 14-9957

RUO: For Research Use Only



Staining of stimulated U937 cells with 0.25 µg of Mouse IgG2a K Isotype Control Purified (cat. 14-4724) (blue) or 0.25 µg of Anti-Human HLA-G Purified (purple) followed by F(ab')<sub>2</sub> Anti-Mouse IgG PE (cat. 12-4012). Total viable cells were used for analysis.

### Product Information

Contents: Anti-Human HLA-G Purified

**REF** Catalog Number: 14-9957

Clone: 87G

Concentration: 0.5 mg/mL

Host/Isotype: Mouse IgG2a

Formulation: aqueous buffer, 0.09% sodium azide, contains stabilizer if necessary



Temperature Limitation: Store at 2-8°C.



Batch Code: Refer to Vial



Use By: Refer to Vial

### Description

The monoclonal antibody 87G recognizes human HLA-G, a member of the Human Leukocyte Antigen family but as part of the nonclassical MHC type involved in inhibiting immune responses. HLA-G has seven reported isoforms. The antibody 87G recognizes both HLA-G1 and the soluble HLA-G5. Expression of HLA-G is found primarily in fetal trophoblast cells as they invade the maternal decidua thereby protecting the fetus from the maternal immune system. Like the highly mitotic trophoblast, abundant HLA-G protein expression has been identified in some tumors, including melanoma, breast carcinoma and renal carcinoma as well as CLL, AML and B-CLL. Some expression has also been found in pancreatic islets, erythroid and endothelial progenitors and the adult thymic medulla. HLA-G+ CD4 or CD8 cells have been identified in normal human peripheral blood and are thought to act as regulatory cells in that they are hypoproliferative with a unique cytokine profile differing from Tregs. The receptors for HLA-G are CD85j/ILT2, CD85d/ILT4, and CD158. Recent studies have shown a role for HLA-G in tolerance and maintenance of transplanted organs.

### Applications Reported

For research use only, not for diagnostic or therapeutic use. This 87G antibody has been reported for use in flow cytometric analysis, and immunohistology staining of frozen tissue sections.

### Applications Tested

This 87G antibody has been tested by flow cytometric analysis of normal human peripheral blood. This can be used at less than or equal to 0.5 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

### References

Carosella ED, Favier B, Rouas-Freiss N, Moreau P, Lemaoult J. Beyond the increasing complexity of the immunomodulatory HLA-G molecule. *Blood*. 2008 May 15;111(10):4862-70. Epub 2008 Mar 11. Review.

Ishitani A, Sageshima N, Lee N, Dorofeeva N, Hatake K, Marquardt H, Geraghty DE. Protein expression and peptide binding suggest unique and interacting functional roles for HLA-E, F, and G in maternal-placental immune recognition. *J Immunol*. 2003 Aug 1;171(3):1376-84.(87G, FC, IH frozen, PubMed)

Rouas-Freiss N, Moreau P, Menier C, Carosella ED. HLA-G in cancer: a way to turn off the immune system. *Semin Cancer Biol*. 2003 Oct;13(5):325-36. Review.

Paul P, Rouas-Freiss N, Moreau P, Cabestre FA, Menier C, Khalil-Daher I, Pangault C, Onno M, Fauchet R, Martinez-Laso J, Morales P, Villena AA, Giacomini P, Natali PG, Frumento G, Ferrara GB, McMaster M, Fisher S, Schust D, Ferrone S, Dausset J, Geraghty D, Carosella ED. HLA-G, -E, -F preworkshop: tools and protocols for analysis of non-classical class I genes transcription and protein expression. *Hum Immunol*. 2000 Nov;61

(11):1177-95.

Onno M, Le Friec G, Pangault C, Amiot L, Guilloux V, Drénou B, Caulet-Maugendre S, André P, Fauchet R. Modulation of HLA-G antigens expression in myelomonocytic cells. Hum Immunol. 2000 Nov;61(11):1086-94. (87G, FC, PubMed)

Yang Y, Chu W, Geraghty DE, Hunt, JS. Expression of HLA-G in human mononuclear phagocytes and selective induction by IFN-gamma J. Immunol., 1996 June;156:4224-4231.

Odum N, Ledbetter JA, Martin P, Geraghty D, Tsu T, Hansen JA, Gladstone P. Homotypic aggregation of human cell lines by HLA class II-, class Ia- and HLA-G-specific monoclonal antibodies. Eur J Immunol. 1991 Sep;21(9):2121-31,(87G FC, PubMed)

#### Related Products

14-4724 Mouse IgG2a K Isotype Control Purified

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