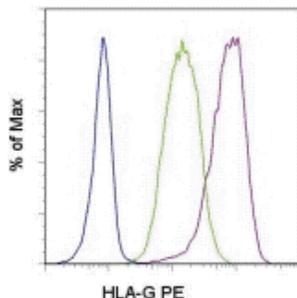


Anti-Human HLA-G PE

Catalog Number: 12-9957

RUO: For Research Use Only. Not for use in diagnostic procedures.



Staining of GM-CSF and IFN gamma-stimulated U937 cells with Mouse IgG2a kappa Isotype Control PE (cat. 12-4724) (blue histogram) or Anti-Human HLA-G PE (purple histogram). Unstimulated U937 cells stained with Anti-Human HLA-G PE are shown in the green histogram. Total viable cells were used for analysis.

Product Information

Contents: Anti-Human HLA-G PE

REF **Catalog Number:** 12-9957

Clone: 87G

Concentration: 5 uL (0.25 ug)/test

Host/Isotype: Mouse IgG2a

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer

 **Temperature Limitation:** Store at 2-8°C. Do not freeze. Light sensitive material.

LOT **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

This 87G antibody has been reported for use in flow cytometric analysis.

Applications Tested

This 87G antibody has been pre-titrated and tested by flow cytometric analysis of stimulated U937 cells. This can be used at 5 µL (0.25 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 10⁵ to 10⁸ cells/test.

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. 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, IHC 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

12-4724 Mouse IgG2a K Isotype Control PE

Not for further distribution without written consent.

Copyright © 2000-2010 eBioscience, Inc.

Tel: 888.999.1371 or 858.642.2058 • Fax: 858.642.2046 • www.eBioscience.com • info@eBioscience.com