

Monoclonal Antibody to HLA class I alpha G / HLA-G - FITC

Alternate names:	HLA class I histocompatibility antigen, HLA-6.0, HLAG, MHC class I antigen G
Catalog No.:	AM03060FC-N
Quantity:	0.1 mg
Concentration:	1.0 mg/ml
Background:	HLA-G belongs to the MHC Class I molecules (MHC Class Ib; nonclassical) and it is expressed on the surface of trophoblast cells.
Uniprot ID:	P17693
NCBI:	NP_002118.1
GeneID:	3135
Host / Isotype:	Mouse / IgG2a
Clone:	87G
Immunogen:	HLA-B27 transgenic mice were immunized with H-2 identical murine cells transfected with and expressing genes encoding HLA-G and human beta2-microglobulin.
Format:	State: Liquid purified Ig fraction. Buffer System: PBS, pH 7.4 with 15 mM sodium azide as preservative. Label: FITC – Conjugated with Fluorescein isothiocyanate under optimum conditions. The reagent is free of unconjugated
Applications:	Suitable for Flow Cytometry (1/100) analysis. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	The antibody 87G recognizes both membrane-bound and soluble forms of HLA-G (HLA-G1 and HLA-G5). Negative Species: Mouse, Rat. Species: Human. Other species not tested.
Storage:	Store the antibody in the dark at 2-8°C. Do Not Freeze! Avoid prolonged exposure to light. Shelf life: One year from despatch.
General Readings:	1. Lee N, Malacko AR, Ishitani A, Chen MC, Bajorath J, Marquardt H, et al. The membrane-bound and soluble forms of HLA-G bind identical sets of endogenous peptides but differ with respect to TAP association. <i>Immunity</i> . 1995 Nov;3(5):591-600. PubMed PMID: 7584149. 2. Riteau B, Menier C, Khalil-Daher I, Martinozzi S, Pla M, Dausset J, et al. HLA-G1 co-expression boosts the HLA class I-mediated NK lysis inhibition. <i>Int Immunol</i> . 2001

For research and in vitro use only. Not for diagnostic or therapeutic work.
Material Safety Datasheets are available at www.acris-antibodies.com or on request.

Antibody Hotline - Technical Questions - Antibody Location Service
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3. Sageshima N, Ishitani A, Omura M, Akasaki M, Umekage H, Katabuchi H, et al. Necrotic feature of the trophoblasts lacking HLA-G expression in normal and pre-eclamptic placentas. *Am J Reprod Immunol.* 2003 Mar;49(3):174-82. PubMed PMID: 12797524.
4. Ishitani A, Sageshima N, Lee N, Dorofeeva N, Hatake K, Marquardt H, et al. 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. PubMed PMID: 12874228.
5. Poláková K, Bandzuchová E, Hofmeister V, Weiss EH, Hutter H, Russ G. Binding analysis of HLA-G specific antibodies to hematopoietic cells isolated from leukemia patients. *Neoplasma.* 2003;50(5):331-8. PubMed PMID: 14628085.
6. Wiendl H, Mitsdoerffer M, Hofmeister V, Wischhusen J, Weiss EH, Dichgans J, et al. The non-classical MHC molecule HLA-G protects human muscle cells from immune-mediated lysis: implications for myoblast transplantation and gene therapy. *Brain.* 2003 Jan;126(Pt 1):176-85. PubMed PMID: 12477705.
7. Menier C, Saez B, Horejsi V, Martinozzi S, Krawice-Radanne I, Bruel S, et al. Characterization of monoclonal antibodies recognizing HLA-G or HLA-E: new tools to analyze the expression of nonclassical HLA class I molecules. *Hum Immunol.* 2003 Mar;64(3):315-26. PubMed PMID: 12590976.
8. Poláková K, Krcová M, Kuba D, Russ G. Analysis of HLA-G expression in malignant hematopoietic cells from leukemia patients. *Leuk Res.* 2003 Jul;27(7):643-8. PubMed PMID: 12681364.
9. Hackmon R, Hallak M, Krup M, Weitzman D, Sheiner E, Kaplan B, et al. HLA-G antigen and parturition: maternal serum, fetal serum and amniotic fluid levels during pregnancy. *Fetal Diagn Ther.* 2004 Sep-Oct;19(5):404-9. PubMed PMID: 15305096.
10. Rouas-Freiss N, Moreau P, Ferrone S, Carosella ED. HLA-G proteins in cancer: do they provide tumor cells with an escape mechanism? *Cancer Res.* 2005 Nov 15;65(22):10139-44. PubMed PMID: 16287995.
11. Shobu T, Sageshima N, Tokui H, Omura M, Saito K, Nagatsuka Y, et al. The surface expression of HLA-F on decidual trophoblasts increases from mid to term gestation. *J Reprod Immunol.* 2006 Dec;72(1-2):18-32. Epub 2006 Jun 27. PubMed PMID: 16806485.
12. LeMaout J, Caumartin J, Daouya M, Favier B, Le Rond S, Gonzalez A, et al. Immune regulation by pretenders: cell-to-cell transfers of HLA-G make effector T cells act as regulatory cells. *Blood.* 2007 Mar 1;109(5):2040-8. Epub 2006 Oct 31. PubMed PMID: 17077329.