

TECHNICAL DATA SHEET

CyFlow™ HLA-G Low Endotoxin Anti-Hu; Clone 87G

REF CY419228

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	HLA-G
Alternative Names	—
Clone	87G
Clonality	monoclonal
Format	Low Endotoxin
Host / Isotype	Mouse / IgG2a
Species Reactivity	Human
Negative Species Reactivity	Mouse Rat
Quantity [Concentration]	0.1 mg [1 mg/ml]
Immunogen	HLA-B27 transgenic mice were immunized with H-2 identical murine cells transfected with and expressing genes encoding HLA-G and human β 2-microglobulin

Specificity

The mouse monoclonal antibody 87G recognizes both membrane-bound and soluble forms of HLA-G (HLA-G1 and HLA-G5). HLA-G belongs to the MHC Class I molecules (MHC Class Ib; nonclassical) and

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it is expressed on the surface of trophoblast cells. The antibody 87G blocks interaction of HLA-G with inhibitory receptors.

Application

Based on published sources, this antibody is suitable for the following applications:

- Flow cytometry
- Immunohistochemistry (frozen sections)
- Functional assays
- Enzyme-linked immunosorbent assay

Storage Buffer

The reagent is provided in azide-free phosphate buffered saline (PBS) solution, pH ≈7.4; 0.2 µm filter sterilized. Endotoxin level is less than 0.01 EU/µg of the protein, as determined by the LAL test.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

References

- Lee N, Malacko AR, Ishitani A, Chen MC, Bajorath J, Marquardt H, Geraghty DE: The membrane-bound and soluble forms of HLA-G bind identical sets of endogenous peptides but differ with respect to TAP association. *Immunity*. 1995; 3(5):591-600. < PMID: 7584149 >
- Riteau B, Menier C, Khalil-Daher I, Martinozzi S, Pla M, Dausset J, Carosella ED, Rouas-Freiss N: HLA-G1 co-expression boosts the HLA class I-mediated NK lysis inhibition. *Int Immunol*. 2001 Feb; 13(2):193-201. < PMID: 11157852 >
- 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 Recognitions. *J Immunol*. 2003; 171:1376. < PMID: 12874228 >
- Polakova K, Bandzuchova 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. < PMID: 14628085 >

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- Wiendl H: The non-classical MHC molecule HLA-G protects human muscle cells from immune-mediated lysis: implications for myoblast transplantation and gene therapy. *Brain*. 2003; 126(1):176-85. < PMID: 12477705 >
- Menier C, Saez B, Horejsi V, Martinozzi S, Krawice-Radanne I, Bruel S, Le Danff C, Reboul M, Hilgert I, Rabreau M, Larrad ML, Pla M, Carosella ED, Rouas-Freiss N: 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. < PMID: 12590976 >
- Sageshima N, Ishitani A, Omura M, Akasaki M, Umekage H, Katabuchi H, Okamura H, Hatake K: 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. < PMID: 12797524 >
- Polakova K, Krcova 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. < PMID: 12681364 >
- Hackmon R, Hallak M, Krup M, Weitzman D, Sheiner E, Kaplan B, Weinstein Y: 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. < PMID: 15305096 >
- 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. < PMID: 16287995 >
- Shobu T, Sageshima N, Tokui H, Omura M, Saito K, Nagatsuka Y, Nakanishi M, Hayashi Y, Hatake K, Ishitani A: 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. < PMID: 16806485 >
- LeMaoult J, Caumartin J, Daouya M, Favier B, Le Rond S, Gonzalez A, Carosella ED: 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. < PMID: 17077329 >

The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

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