TECHNICAL DATA SHEET

CyFlow™ HLA-G FITC
Anti-Hu; Clone 87G

REF **AR259926**

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	HLA-G
Alternative Names	—
Clone	87G
Clonality	monoclonal
Format	FITC
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 imunized with H-2 identical murine cells transfected with and expressing genes encoding HLA-G and human β2-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

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com

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

Application

The reagent is designed for Flow Cytometry analysis. Suggested working usage is 10 µg/ml. Indicated dilution is recommended starting point for use of this product, but working concentrations should be validated by the investigator.
Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in phosphate buffered saline (PBS) solution, pH ≈7.4, containing 0.1% (w/v) sodium azide.

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 >
- 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 >

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com

- 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 andpre-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 hematopoetic 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.

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com