

PRODUCT INFORMATION SHEET

Monoclonal antibodies detecting human antigens

Anti-HLA-G

PURE	RUO	REF	IQP-635P	▽ 100 test
FITC	RUO	REF	IQP-635F	▽ 100 test
R-PE	RUO	REF	IQP-635R	▽ 100 test
Biotin	RUO	REF	IQP-635B	▽ 100 test

RUO **For Research Use Only**



Description

Clone

87G

Isotype

Murine IgG2a

Specificity

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

Species

Human

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.

Applications

FC, IHC(F), ELISA, FUNC. Determining optimal working dilutions by titration test.

Limitations

1. Conjugates with brighter fluorochromes, like PE and APC, will have a greater separation than those with dyes like FITC and CyQ. When populations overlap, the percentage of positive cells using a selected marker can be affected by the choice of fluorescent label.
2. Use of monoclonal antibodies in patient treatment can interfere with antigen target recognition by this reagent. This should be taken into account when samples are analyzed from patients treated in this fashion. IQ Products has not characterized the effect of the presence of therapeutic antibodies on the performance of this reagent.
3. Reagents can be used in different combinations, therefore laboratories need to become familiar performance characteristics of each antibody in relation with the combined markers in normal and abnormal samples.
4. Reagent performance can be affected by the use of anticoagulants.



Handling and Storage

Antibodies are supplied in phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4. Store the vials at 2-8°C. Monoclonal antibodies should be protected from prolonged exposure to light when conjugated with fluorochromes. Reagents are stable for the period shown on the vial label when stored properly.

Warranty

Products sold hereunder are warranted only to conform to the quantity and contents stated on the label at the time of delivery to the customer. There are no warranties, expressed or implied, which extend beyond the description on the label of the product. IQ Products is not liable for property damage, personal injury, or economic loss caused by the product.

Characterization

To ensure consistently high-quality reagents, each batch of monoclonal antibody is tested for conformance with characteristics of a standard reagent.

Warning

All products contain sodiumazide. This chemical is poisonous and hazardous. Handling should be done by trained staff only.

References

1. Lee N. et al.: The membrane-bound and soluble forms of HLA-G bind identical sets of endogenous peptides but differ with respect to TAP association. *Immunity* 3(5), 591(1995).
2. Riteau B. et al.: HLA-G1 co-expression boosts the HLA class I-mediated NK lysis inhibition. *Int Immunol.* 13(2), 193 (2001).
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4. Ishitani A. et al.: Protein Expression and Peptide Binding Suggest Unique and Interacting Functional Roles for HLA-E, F and G in Maternal-Placental Immune Recognitions. *The Journal of Immunology* 171, 1376 (2003).
5. 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.
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8. 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.
9. 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.
10. 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.
11. LeMaout 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.

Explanation of used symbols



Consult instructions for use

Catalogue number



Sufficient for



Caution, consult accompanying document



Keep away from (sun)light



Biological risks



Temperature limitation (°C)



For Research Use Only



Batch code



Use by yyyy-mm-dd



Manufacturer

		Label - tandem	Ex -max (nm)	Em -max (nm)
P	PURE	purified material	-	-
F	FITC	FITC	488	519
R	R-PE	PE	488, 532	578
C	CyQ	PE-Cy5.18	488, 532	667
A	APC		595, 633, 635, 647	660
PC	PerCP		488, 532	678
PCC	PerCP-Cy5.5		488, 532	695



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