Product Data Sheet

Purified anti-human HLA-G

Catalog # / Size: 2279510 / 100 μg

Clone: 87G

Isotype: Mouse IgG2a, κ

Immunogen: HLA-G transfected cells

Reactivity: Human

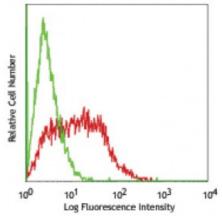
Preparation: The antibody was purified by affinity

chromatography.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

Concentration: 0.5



Human cytotrophoblastic cell line (JEG-3) stained with purified 87G, followed by anti-mouse IgG FITC

Applications:

Applications: Other

Recommended

Usage:

Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤ 1.0 microg per 10^6 cells in 100 microL volume or 100 microL of

whole blood. It is recommended that the reagent be titrated for optimal

performance for each application.

Application

Notes:

87G mAb reacts with isoforms of HLA-G1 and -G5. Additional reported applications (for the relevant formats) include: restoring HLA-G mediated

suppression of allo-T cell proliferation and immunohistochemical staining of frozen

tissue sections. Clone 87G is reported not to bind HLA-G in aldehyde fixed

samples.4

Application References:

1. Odum N, et al. 1991. Eur. J. Immunol. 21:2121.

2. Lila N, et al. 2001. P. Natl. Acad. Sci. USA 98:12150.

3. Lila N, et al. 2002. Circulation. 105:1949.

4. Blaschitz A, et al. 2000. Hum. Immunol. 61:1074.

5. Balsamo M, et al. 2012. Eur J. Immunol. 42:1833. PubMed

Description:

HLA-G is a nonclassical MHC class I (MHC-Ib) molecule structurally related to MHC class Ia (HLA-A,B, C). There are seven isoforms of this molecule, including membrane bound HLA-G1, -G2, -G3 and -G4 and soluble HLA-G5, -G6, and -G7. HLA-G is primarily expressed on trophoblast cells. Its expression is also found on thymic epithelial cells, cytokine-activated moncytes, macrophages/dendritic cells during viral infection, and in various tumors. HLA-G exerts its inhibitory functions

to regulate immune tolerance via interaction with inhibitory receptors ILT2(CD85j), ILT4(CD85d), and KIR2DL4(CD158d), which is expressed on NK cells, T cells, monocytes, dendritic cells, and B cells. HLA-G is also able to bind CD8 α/α ,

which may mediate positive and/or negative selection in thymus.

Antigen

1. Hunt JS, et al. 2005. FASEB J. 19:681.

References: 2. Carosella ED, et al. 2008. Blood 111:4862.