SONY

Product Data Sheet

Alexa Fluor® 488 anti-human HLA-G

Catalog # / Size: 2279590 / 100 tests
2279585 / 25 tests

Clone: 87G

Isotype: Mouse IgG2a, κ

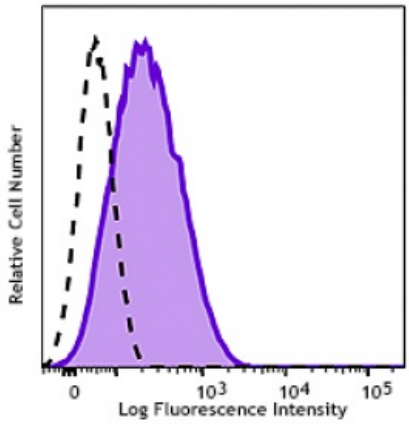
Immunogen: HLA-G transfected cells

Reactivity: Other

Preparation: The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 488 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 488.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

Concentration: Lot-specific



Human cytotrophoblastic cells (JEG-3 cell line) were stained with HLA-G (clone 87G) Alexa Fluor® 488 (filled histogram) or mouse IgG2a Alexa Fluor® 488 isotype control (open histogram).

Applications:

Applications: Flow Cytometry

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 5 µl per million cells or 5 µl per 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

* Alexa Fluor® 488 has a maximum emission of 519 nm when it is excited at 488 nm.

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. Hunt JS, *et al.* 2005. *FASEB J.* 19:681.
2. Carosella ED, *et al.* 2008. *Blood* 111:4862.

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 CD8α/α, which may mediate positive and/or negative selection in thymus.

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

Sony Biotechnology Inc. 1730 North First Street, San Jose, CA 95112 www.sonybiotechnology.com

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