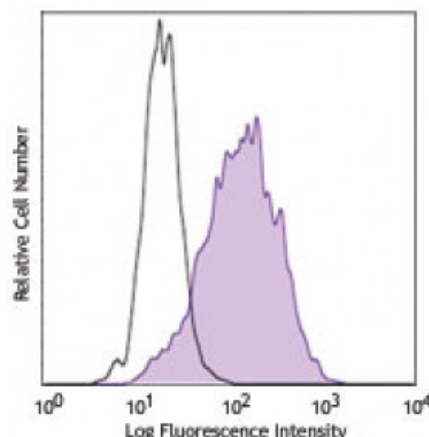


**APC anti-human HLA-G**

<b>Catalog # / Size:</b>	2279545 / 25 tests 2279550 / 100 tests
<b>Clone:</b>	87G
<b>Isotype:</b>	Mouse IgG2a, $\kappa$
<b>Immunogen:</b>	HLA-G transfected cells
<b>Reactivity:</b>	Human
<b>Preparation:</b>	The antibody was purified by affinity chromatography and conjugated with APC under optimal conditions. The solution is free of unconjugated APC and unconjugated antibody.
<b>Formulation:</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).
<b>Concentration:</b>	Lot-specific



Human cytotrophoblastic cell line (JEG-3) was stained with HLA-G (clone 87G) APC (filled histogram) or mouse IgG2a APC 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. **Test size products are transitioning from 20 microL to 5 microL per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 microL staining volume or per 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.<sup>4</sup>

**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 monocytes, 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 $\alpha/\alpha$ , 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.