Technical Data Sheet

Purified Mouse Anti-human HLA-G Denatured

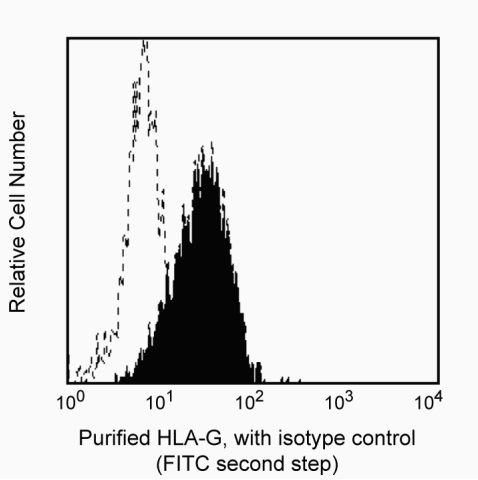
Product Information

Material Number:	**557577**
Size:	0.1 mg
Concentration:	0.5 mg/ml
Clone:	4H84
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Human
Workshop:	NA
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

HLA-G is a HLA class I molecule, but it is distinct from other class I molecules because of its quasi-monomorphism and restricted tissue distribution. It can be expressed as seven distinct protein forms. HLA-G1, -G2, G3, and -G4 are membrane bound while HLA-G5, -G6, and G7 are soluble. HLA-G is expressed in healthy individuals on amniocytes and cytotrophoblasts in the amnion-chorion. HLA-G interacts with inhibitory receptors such as ILT-2, ILT-4, p49 and KIR2DL4 expressed on NK cells, shifts the cytokine balance towards Th2 dominance, suppresses the proliferation of allogeneic CD4 lymphocytes and, in its soluble form, induces apoptosis of activated CD8 cells and inhibits cytolysis by NK cells.

This antibody is routinely tested by flow cytometric analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.



Profile of human HLA-G (denatured) reactivity on fixed, permeabilized JEG-3 cell line analyzed by flow cytometry. *Fixed and permeabilized with Cat. No. 554714. Second step staining with Cat. No. 555988.*

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Store undiluted at 4° C.

Application Notes

Application

Flow cytometry	Routinely Tested
Western blot	Tested During Development
Immunohistochemistry-frozen	Tested During Development
Immunohistochemistry-paraffin	Tested During Development

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Recommended Assay Procedure:

This product is routinely tested on fixed and permeabilized (BD Cytofix/Cytoperm™, Cat. No. 554714) JEG-3 cell line by flow cytometry. It's also suitable for Western blotting and for staining acetone-fixed frozen tissue sections at 1-10 µg/ml and formalin fixed paraffin tissue sections at 1-10 µg/ml with citrate buffer pretreatment.

Suggested Companion Products

Catalog Number	Name	Size	Clone
555746	Purified Mouse IgG1, κ Isotype Control	0.1 mg	MOPC-21
555988	FITC Goat Anti-Mouse IgG/IgM	0.5 mg	Polyclonal

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

References

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Le Bouteiller P, Blaschitz A. The functionality of HLA-G is emerging. *Immunol Rev.* 1999; 167:233-244.(Biology)

Le Bouteiller P, Solier C, Proll J, Aguerre-Girr M, Fournel S, Lenfant F. Placental HLA-G protein expression in vivo: where and what for. *Hum Reprod Update.* 1999; 5(3):223-233.(Biology)

Le Gal FA, Riteau B, Sedlik C, et al. HLA-G-mediated inhibition of antigen-specific cytotoxic T lymphocytes. *Int Immunol.* 1999; 11(8):1351-1356.(Biology)

McMaster M, Zhou Y, Shorter S, et al. HLA-G isoforms produced by placental cytotrophoblasts and found in amniotic fluid are due to unusual glycosylation. *J Immunol.* 1998; 160(12):5922-5928.(Clone-specific: Immunohistochemistry, Western blot)