

Brilliant Violet 421™ anti-human HLA-G Recombinant Antibody

Catalog# / Size	381809 / 25 tests 381810 / 100 tests
Clone	QA19A11
Regulatory Status	RUO
Isotype	Mouse IgG1, κ
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 CD8α/α, which may mediate positive and/or negative selection in the thymus.

Product Details

Verified Reactivity	Human
Antibody Type	Recombinant
Host Species	Mouse
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 421™ under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our Certificate of Analysis online tool.)
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
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 in 100 µL staining volume or 5 µL per 100 µL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. Brilliant Violet 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ is a trademark of Sirigen Group Ltd. Learn more about Brilliant Violet™. This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.
Excitation Laser	Violet Laser (405 nm)
Application Notes	Clone QA19A11 partially blocks the binding of reported clone MEMG/9.

RRID AB_3717111 (BioLegend Cat. No. 381809)
AB_3717111 (BioLegend Cat. No. 381810)

Antigen Details

Structure	Ig
Distribution	Trophoblast cells, thymic epithelial cells, cytokine-activated monocytes, macrophages/dendritic cells during viral infection, various tumors
Function	Inhibit NK and T cell-mediated cytotoxicity and T cell proliferation, induce apoptosis of activated CD8 ⁺ T cells, induce Th2 cytokine production
Interaction	Dendritic cells, Epithelial cells, Macrophages, Monocytes
Ligand/Receptor	ILT2 (CD85j), ILT4 (CD85d), KIR2DL4 (CD158d), CD8α/α
Cell Type	Dendritic cells, Epithelial cells, Macrophages, Monocytes
Biology Area	Immunology
Molecular Family	MHC Antigens
Antigen References	1. Hunt JS, <i>et al.</i> 2005. <i>FASEB J.</i> 19:681. 2. Carosella ED, <i>et al.</i> 2008. <i>Blood.</i> 111:4862.

Gene ID [3135](#)

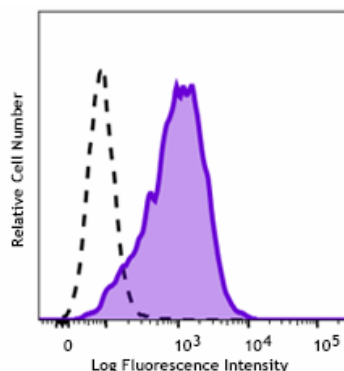
Related Protocols

- [Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Purified anti-human HLA-G Recombinant Antibody, APC anti-human HLA-G Recombinant Antibody, Brilliant Violet 421™ anti-human HLA-G Recombinant Antibody, Brilliant Violet 785™ anti-human HLA-G Recombinant Antibody, Alexa Fluor® 488 anti-human HLA-G Recombinant Antibody, PE anti-human HLA-G Recombinant Antibody

Product Data



Human cytotrophoblastic cell line JEG-3 was stained with anti-human HLA-G recombinant (clone QA19A11) Brilliant Violet 421™ (filled histogram) or mouse IgG1, κ Brilliant Violet 421™ isotype control (open histogram).

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