

Brilliant Violet 421™ anti-human B7-H4 Antibody

Catalog# / Size	358121 / 25 tests 358122 / 100 tests
Clone	MIH43
Regulatory Status	RUO
Other Names	VTCN1, B7h.5
Isotype	Mouse IgG1, κ
Description	B7-H4, also known as VTCN1, is a type I transmembrane protein and member of the B7 family. Its extracellular region consists of one IgV-like and one IgC-like domain. B7-H4 expression has been reported on activated T cells, B cells, monocytes, and dendritic cells. On T cells, B7-H4 inhibits proliferation, cytokine secretion, and cytotoxicity. B7-H4 is also expressed by different carcinomas including renal, gastric, breast, ovarian and melanoma. Its expression is associated with a poor prognosis.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
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	<p>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.</p> <p>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.</p> <p>Learn more about Brilliant Violet™.</p> <p>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.</p>
Excitation Laser	Violet Laser (405 nm)
Application Notes	Additional reported applications (for the relevant formats) includes immunofluorescence ² .

Application References

1. Quandt D, *et al.* 2011. *Clin. Cancer Res.* 17:3100.
2. Smith JB, *et al.* 2014. *Gynecol. Oncol.* 134:181. (FC, IF)

(PubMed link indicates BioLegend citation)

RRID

AB_3675082 (BioLegend Cat. No. 358121)
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Antigen Details

Structure	Type I transmembrane protein, member of the B7 family, one IgV-like, one IgC-like domain
Distribution	Activated T cells, B cells, monocytes, and dendritic cells; different cancer types including melanoma, renal, gastric, breast and ovarian
Function	Inhibits T cell proliferation, cytokine secretion, and development of cytotoxicity
Cell Type	B cells, Dendritic cells, Monocytes, T cells, Tregs
Biology Area	Costimulatory Molecules, Immunology

Antigen References

1. Fauci JM, *et al.* 2012. *Gynecol. Oncol.* 127:420.
2. Chen C, *et al.* 2012. *J. Immunother.* 35:354.
3. Guo G, *et al.* 2012. *Clin. Rheumatol.* 31:271.
4. Arigami T, *et al.* 2010. *J. Surg. Oncol.* 102:748.

Gene ID

[79679](#)

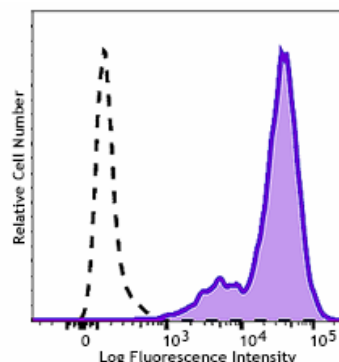
Related Protocols

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

Other Formats

Purified anti-human B7-H4 , PE anti-human B7-H4 , PE/Cyanine7 anti-human B7-H4 , APC anti-human B7-H4 , PerCP/Cyanine5.5 anti-human B7-H4 , PE/Dazzle™ 594 anti-human B7-H4 , TotalSeq™-A0395 anti-human B7-H4, TotalSeq™-C0395 anti-human B7-H4, APC/Fire™ 750 anti-human B7-H4, TotalSeq™-B0395 anti-human B7-H4, Brilliant Violet 421™ anti-human B7-H4

Product Data



Human B7-H4 transfected P815 cells were stained with anti-human B7-H4 (clone MIH43) Brilliant Violet 421™ (filled histogram) or mouse IgG1, κ Brilliant Violet 421™ isotype control (open histogram).

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