

Brilliant Violet 421™ anti-human CD158/h (KIR2DL1/KIR2DS1) Antibody

Catalog# / Size	317113 / 25 tests 317114 / 100 tests
Clone	S22013A
Regulatory Status	RUO
Other Names	CD158a (KIR2DL1, NKAT1, p58.1, KIR221, KIR-K64), CD158h (KIR2DS1, p50.1)
Isotype	Mouse IgG1, κ
Description	CD158 molecules, also known as KIRs (killer cell immunoglobulin-like receptors), are a family of transmembrane proteins with either two (KIR2D) or three (KIR3D) Ig-like extracellular domains. Some KIRs with long cytoplasmic domains contain ITIMs and possess inhibitory functions and others with short cytoplasmic region lack ITIM and have activation functions. Fifteen polymorphic KIR genes have been reported in humans. CD158a and CD158h are 38-50 kD two extracellular Ig domain single-pass glycoprotein that contains a short cytoplasmic tail for KIR2DL1. It is expressed primarily on a subset of NK cells and a subset of T cells. KIR2DL1 and KIR2DS1 have been reported to bind certain HLA-C antigens on target cells (HLA-C*02, HLA-C*04, HLAC*06, for example).

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Human KIR2DS1 transfected cells
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™.](#)

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Excitation Laser	Violet Laser (405 nm)
Application Notes	Clone S22013A can block the binding of clone HP-DM1 on target cells and is not blocked by HP-DM1. Based on in-house testing on different KIR-expressing transfectants, clone S22013A does not interact with other KIR protein family members.
RRID	AB_3720564 (BioLegend Cat. No. 317113) AB_3720564 (BioLegend Cat. No. 317114)

Antigen Details

Structure	38-50 kD two Ig-like extracellular domain glycoprotein
Distribution	Subset of NK cells, subset of T cells
Function	NK cell regulation
Ligand/Receptor	Some HLA-C molecules
Cell Type	Lymphocytes, NK cells, T cells
Biology Area	Cell Biology, Immunology, Innate Immunity
Molecular Family	CD Molecules

Antigen References

1. Vilches C, *et al.* 2002. *Annu. Rev. Immunol.* 92.107361.
2. Middleton D, *et al.* 2010. *Immunol.* 123:8.
3. Meenagh A, *et al.* 2008. *Tissue Antigens.* 72.4.
4. Le Luduec J.B, *et al.* 2019. *Frontiers Immu.* 10.734.
5. Chewning J.H, *et al.* 2007. *Journals of Immu.* 179.2.

Gene ID [3802](#)
[3806](#)

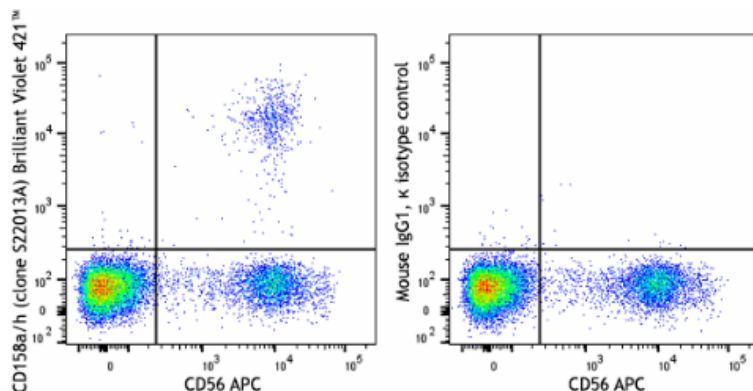
Related Protocols

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

Other Formats

Purified anti-human CD158a/h (KIR2DL1/KIR2DS1), PE anti-human CD158a/h (KIR2DL1/KIR2DS1) Antibody, Brilliant Violet 421™ anti-human CD158/h (KIR2DL1/KIR2DS1) Antibody

Product Data



Human peripheral blood lymphocytes were stained with anti-human CD56 (clone QA17A16) APC and anti-human CD158a/h (KIR2DL1/KIR2DS1) (clone S22013A) Brilliant Violet 421™ (left) or mouse IgG1, κ Brilliant Violet 421™ isotype control (right).

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