

Brilliant Violet 421™ anti-human CD158b/j (KIR2DL2/L3/S2) Antibody

Catalog# / Size	316813 / 25 tests 316814 / 100 tests
Clone	S22038E
Regulatory Status	RUO
Other Names	CD158b1 (KIR2DL2, p58.2, NKAT6), CD158b2 (KIR2DL3, p58.3, NKAT2), CD158j (KIR2DS2, p50.2), KIR-NKAT2
Isotype	Rat 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. KIRs with long cytoplasmic domains contain ITIM motifs and possess inhibitory functions, while those with short cytoplasmic tails lack ITIMs and have activating functions. Fifteen polymorphic KIR genes have been reported in humans. CD158b1, CD158b2, and CD158j are 33-38 kD glycoproteins with two extracellular Ig-like domains and either a long cytoplasmic tail with ITIM motifs (KIR2DL2/KIR2DL3) or a short tail containing an ITAM-associated activating motif (KIR2DS2). These receptors are expressed primarily on subsets of NK and T cells. KIR2DL2, KIR2DS2, and KIR2DL3 have been reported to recognize specific HLA-C alleles on target cells, such as HLA-C*01, HLA-C*03, and HLA-C*07.
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Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	Human KIR2DS2 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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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 S22038E is able to block the binding of clone DX27 on target cells and is partially blocked by DX27. Based on in-house testing on different KIR-expressing transfectants, clone S22038E does not interact with other KIR protein family members.

Antigen Details

Structure	33-38 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, <i>et al.</i> 2002. <i>Annu Rev Immunol.</i> 92:107361. 2. Middleton D, <i>et al.</i> 2010. <i>Immunol.</i> 123:8. 3. Moesta AK, <i>et al.</i> 2012. <i>Frontiers Immu.</i> 3:336. 4. David G, <i>et al.</i> 2013. <i>Journal of Immu.</i> 191:9.
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Gene ID	3803 3804 100132285
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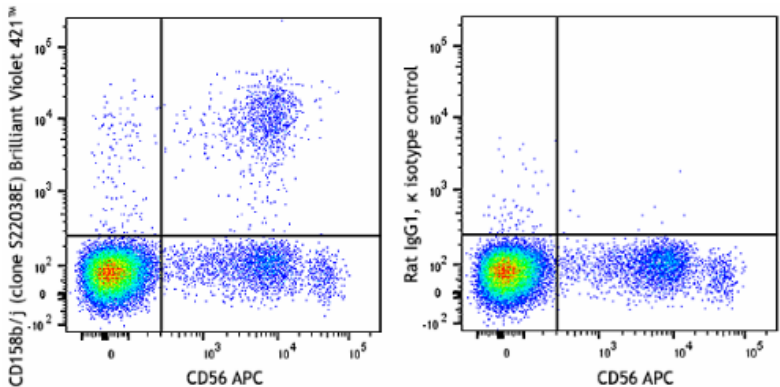
Related Protocols

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

Other Formats

Purified anti-human CD158b/j (KIR2DL2/L3/S2), PE anti-human CD158b/j (KIR2DL2/L3/S2) Antibody, Brilliant Violet 421™ anti-human CD158b/j (KIR2DL2/L3/S2)

Product Data



Human peripheral blood lymphocytes were stained with anti-human CD56 (clone QA17A16) APC and anti-human CD158b/j (KIR2DL2/L3/S2) (clone S22038E) Brilliant Violet 421™ (left) or rat IgG1, κ Brilliant Violet 421™ isotype control (right).

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