

Brilliant Violet 421™ anti-human IL-1RL1 (ST2) Antibody

Catalog# / Size	379407 / 25 tests 379408 / 100 tests
Clone	A16008J
Regulatory Status	RUO
Other Names	IL-33R, ST2, IL-1RL1
Isotype	Mouse IgG2b, κ
Description	IL1RL1 is a member of the Toll-like receptor superfamily the receptor for Interleukin-33. It is a 556 amino acid single-pass type I membrane protein. ST2 exists in two forms as splice variants: a soluble form, which acts as a decoy receptor and sequesters free IL-33, and a membrane-bound form (ST2), which activates the MyD88/NF-κB signaling pathway. Signaling through IL1RL1 drives cytokine production in mast cells, basophils, eosinophils, invariant NKT and NK cells, Th2 lymphocytes, and type 2 innate immune cells. IL-33 signaling is required for maintaining the suppressive function of regulatory T cells.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Recombinant human IL-1RL1, AA19-328
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)
RRID	

Antigen Details

Structure	Single-pass type I membrane protein
Distribution	Th2 lymphocytes, mast cells, eosinophils, basophils, smooth muscle cells, endothelial cells
Function	Cytokine signaling
Interaction	Signaling requires association of the coreceptor IL1RAP. Recruits MYD88, IRAK1, IRAK4, and TRAF6.
Ligand/Receptor	IL-33
Cell Type	Basophils, Endothelial cells, Eosinophils, Lymphocytes, NK cells, Th2, Tregs
Biology Area	Immunology
Molecular Family	Cytokine/Chemokine Receptors
Antigen References	1. Schmitz J, <i>et al.</i> 2005. <i>Immunity</i> . 23: 479-490. 2. Brint E, <i>et al.</i> 2004. <i>Nat Immun.</i> 5:373-379. 3. Griesenauer B, <i>et al.</i> 2017. <i>Front Immunol.</i> 8:475.

Gene ID [9173](#)

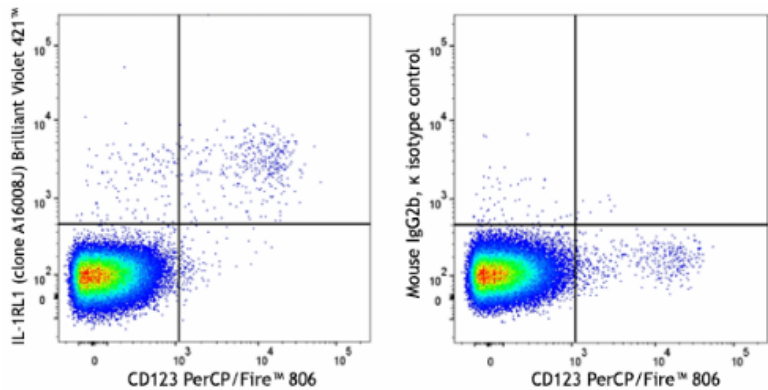
Related Protocols

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

Other Formats

PE/Dazzle™ 594 anti-human IL-1RL1 (ST2), Purified anti-human IL-1RL1 (ST2), PE anti-human IL-1RL1 (ST2), PE/Cyanine7 anti-human IL-1RL1 (ST2), APC anti-human IL-1RL1 (ST2), Brilliant Violet 421™ anti-human IL-1RL1 (ST2)

Product Data



Human peripheral blood mononuclear cells were stimulated with IL-3 overnight and stained with anti-human HLA-DR (clone L243) FITC, anti-human CD123 (clone S18016C) PerCP/Fire™ 806 and anti-human IL-1RL1 (ST2) (clone A16008J) Brilliant Violet 421™ (left) or mouse IgG2b, κ Brilliant Violet 421™ isotype control (right). Data shown was gated on HLA-DR negative cells.

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