

Brilliant Violet 421™ anti-human CD125 (IL-5R α) Antibody

Catalog# / Size	384711 / 25 tests 384712 / 100 tests
Clone	S20015E
Regulatory Status	RUO
Other Names	IL5RA, IL5R, CDw125, HSIL5R3
Isotype	Mouse IgG1, κ
Description	CD125, also known as IL5 receptor α -chain, is a 60 kD type I transmembrane protein that binds IL-5 and associates in a heterodimer with the signal-transducing β subunit CD131 to form the IL-5 receptor. The affinity of CD125 for IL-5 is increased when is associated with CD131. The cytoplasmic region of CD125 activates the JAK2/STAT5 pathway and the kinase Btk. CD125 is expressed by eosinophils, basophils, mast cells, B1 cells and a subset of resting B2 cells and have a central role in the differentiation, activation and survival of these cells. Due to the restricted expression of this molecule, it is considered a potential therapeutic target for allergic inflammatory conditions.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Mouse IL-5R α 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	<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)
RRID	AB_3699036 (BioLegend Cat. No. 384711)

Antigen Details

Structure	Type I transmembrane protein, 60 kD
Distribution	Eosinophils, basophils, mast cells, B1 cells, subset of resting B2 cells
Function	Role in eosinophils and basophils differentiation, activation and survival
Interaction	JAK2/STAT, Btk, SOX4
Ligand/Receptor	IL-5
Cell Type	B cells, Basophils, Eosinophils
Biology Area	Cell Biology, Cell Proliferation and Viability, Immunology
Molecular Family	CD Molecules, Cytokine/Chemokine Receptors
Antigen References	

1. Buchheit KM, *et al.* 2020. *J Allergy Clin Immunol.* 145:1574-1584.
2. Lin X, *et al.* 2020. *Inflammation.* 43:1797-1805.
3. Gorski SA, *et al.* 2019. *PLoS One.* 14:e0221113.
4. Varricchi G, *et al.* 2016. *Curr Opin Allergy Clin Immunol.* 16:186-200.
5. Beekman JM. *et al.* 2009. *Blood.* 114:3917-27.
6. Lei JT. *et al.* 2008. *J Leukoc Biol.* 84:499-509.

Gene ID [3568](#)

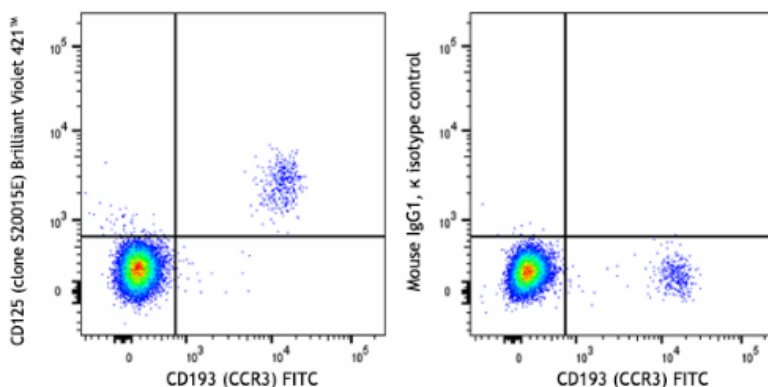
Related Protocols

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

Other Formats

Purified anti-human CD125 (IL-5R α), PE anti-human CD125 (IL-5R α), TotalSeq™-C1287 anti-human CD125 (IL-5R α), TotalSeq™-A1287 anti-human CD125 (IL-5R α) Antibody, Brilliant Violet 421™ anti-human CD125 (IL-5R α), Brilliant Violet 605™ anti-human CD125 (IL-5R α)

Product Data



Human peripheral blood lymphocytes were stained with anti-human CD193 (CCR3) (clone 5E8) FITC and anti-human CD125 (IL-5R α) (clone S20015E) Brilliant Violet 421™ (left) or mouse IgG1, κ Brilliant Violet 421™ isotype control (right).

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