

Brilliant Violet 605™ anti-mouse IL-33Rα (IL1RL1, ST2) Antibody

Catalog# / Size	145323 / 50 µg
Clone	DIH9
Regulatory Status	RUO
Other Names	T1/ST2, ST2L, IL-1R1, T1, DER4, IL1R1
Isotype	Rat IgG2a, κ
Description	IL-33Rα, also known as ST2 or IL-1RL1, is a member of the Toll/IL-1 receptor family. It binds IL-33 and is structurally similar to IL-1R1. Two forms of the protein exist - a soluble form known as ST2 and a membrane anchored form known as ST2L. The membrane form is expressed by Th2 cells and bone marrow derived mast cells, whereas the soluble form is expressed by serum-stimulated fibroblasts.

Blocking with anti-ST2 antibodies has been shown to alleviate experimental arthritis and airway inflammation. The IL-33-ST2 axis has been reported to be important across a range of diseases including asthma, allergies, and cardiac disease.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	IL-33Rα-hFcγ1 fusion protein.
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 605™ under optimal conditions.
Concentration	0.2 mg/mL
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 ≤ 0.5 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 605™ excites at 405 nm and emits at 603 nm. The bandpass filter 610/20 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel. Refer to your instrument manual or manufacturer for support. Brilliant Violet 605™ is a trademark of Sirigen Group Ltd.

[Learn more about Brilliant Violet™.](#)

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Application References

(PubMed link indicates BioLegend citation)

1. Hashiguchi M, *et al.* 2014. *Eur. J. Immunology*. (FC) [PubMed](#)

Antigen Details

Structure	63 kD, IL-1 receptor family member, single pass type I membrane protein
Distribution	Mast cells, Th2 cells, and fibroblasts
Function	Following interaction with IL-33, it recruits MyD88, Irak1, Irak4 and Traf6 followed by phosphorylation of the MAP/ERK pathway.
Interaction	Interacts with MyD88, Irak1, Irak4 and Traf6
Ligand/Receptor	IL-33
Cell Type	Fibroblasts, Mast cells, Th2
Biology Area	Immunology, Innate Immunity
Molecular Family	Cytokine/Chemokine Receptors
Antigen References	<ol style="list-style-type: none"> 1. Yanagisawa K, <i>et al.</i> 1993. <i>FEBS Lett.</i> 318:83. 2. Schmitt E, <i>et al.</i> 1990. <i>Cytokine</i> 6:407. 3. Yanagisawa K, <i>et al.</i> 1992. <i>FEBS Lett.</i> 302:51. 4. Takagi T, <i>et al.</i> 1993. <i>Biochim Biophys Acta.</i> 1178:194.
Gene ID	17082

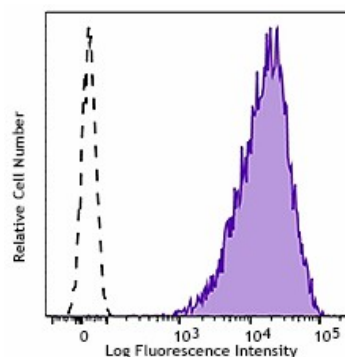
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Purified anti-mouse IL-33R α (IL1RL1, ST2), PE anti-mouse IL-33R α (IL1RL1, ST2), APC anti-mouse IL-33R α (IL1RL1, ST2), PerCP/Cyanine5.5 anti-mouse IL-33R α (IL1RL1, ST2), Brilliant Violet 421™ anti-mouse IL-33R α (IL1RL1, ST2), Biotin anti-mouse IL-33R α (IL1RL1, ST2), PE/Dazzle™ 594 anti-mouse IL-33R α (IL1RL1, ST2), PE/Cyanine7 anti-mouse IL-33R α (IL1RL1, ST2), TotalSeq™-A0837 anti-mouse IL-33R α (IL1RL1, ST2), TotalSeq™-C0837 anti-mouse IL-33R α (IL1RL1, ST2), Brilliant Violet 785™ anti-mouse IL-33R α (IL1RL1, ST2), Brilliant Violet 605™ anti-mouse IL-33R α (IL1RL1, ST2), APC/Fire™ 750 anti-mouse IL-33R α (IL1RL1, ST2), Brilliant Violet 711™ anti-mouse IL-33R α (IL1RL1, ST2)

Product Data



Mouse Th2 clone D10.G4.1 was stained with anti-mouse IL-33R α (IL1RL1, ST2) (clone D10.G4.1) Brilliant Violet 605™ (filled histogram) or rat IgG2a, κ Brilliant Violet 605™ isotype control (open histogram).

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