

# IL-33R (ST2) Monoclonal Antibody (RMST2-33), PerCP-eFluor 710, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Rat / IgG2b, kappa
Recommended Isotype Control	Rat IgG2b kappa Isotype Control (eB149/10H5), PerCP-eFluor 710, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	RMST2-33
Conjugate	PerCP-eFluor™ 710
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2573881

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.25 µg/test	3 Publications

## Product Specific Information

Description: The RMST2-33 monoclonal antibody reacts with mouse ST2, also known as IL-33R or interleukin 1 receptor-like 1. ST2 is a member of the IL-1 receptor family. In the membrane-bound form, it consists of three extracellular immunoglobulin domains and an intracellular toll-interleukin-1 receptor domain. ST2 forms a dimer with IL-1R accessory protein in a ligand-dependent manner. IL-33/ST2 interaction induces the production of TH2 cytokines. ST2 also has a soluble isoform lacking transmembrane and intracellular toll-interleukin-1 receptor domains. It is believed that the soluble form functions as a decoy receptor that can block membrane bound IL-33/ST2 interaction. ST2 is expressed by TH2 lymphocytes, mast cells, eosinophils, basophils, innate lymphocytes, smooth muscle cells, and endothelial cells and is involved in host defense, allergy, and inflammation. IL-33/ST2 interaction has also been shown to be atheroprotective.

RMST2-33 has been reported to bind and activate ST2 in in vitro assays.

Applications Reported: This RMST2-33 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This RMST2-33 antibody has been tested by flow cytometric analysis of mouse bone marrow-derived mast cells. This can be used at less than or equal to 0.25 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

PerCP-eFluor® 710 emits at 710 nm and is excited with the blue laser (488 nm); it can be used in place of PerCP-Cyanine5.5. We recommend using a 710/50 bandpass filter, however, the 695/40 bandpass filter is an acceptable alternative. Please make sure that your instrument is capable of detecting this fluorochrome.

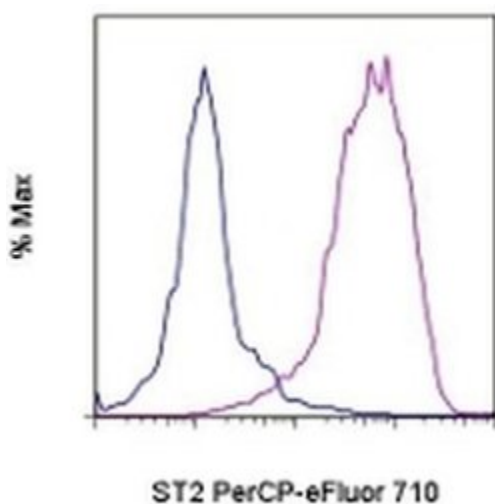
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 µL of cell sample + 100 µL of IC Fixation Buffer) or 1-step Fix/Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency /compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

Excitation: 488 nm; Emission: 710 nm; Laser: Blue Laser.

Filtration: 0.2 µm post-manufacturing filtered.

## Product Images For IL-33R (ST2) Monoclonal Antibody (RMST2-33), PerCP-eFluor 710, eBioscience™



### IL-33R (ST2) Antibody (46-9333-82) in Flow

Staining of mouse bone marrow-derived mast cells with 0.125 µg of Rat IgG2b K Isotype Control PerCP-eFluor® 710 (Product # 46-4031-82) (blue histogram) or 0.125 µg of Anti-Mouse ST2 (IL-33R) PerCP-eFluor® 710 (purple histogram). Cells in the large scatter population were used for analysis.

[View more figures on thermofisher.com](https://www.thermofisher.com)

### Flow Cytometry (3)

#### Nature communications

#### Attenuation of TCR-induced transcription by Bach2 controls regulatory T cell differentiation and homeostasis.

"46-9333 was used in Flow cytometry/Cell sorting to show homeostasis of thymically-derived and peripherally-derived Treg cells is maintained through the balancing of TCR signaling induced transcriptional activity by Bach2."

Authors: Sidwell T, Liao Y, Garnham AL, Vasanthakumar A, Gloury R, Blume J, Teh PP, Chisanga D, Thelemann C, de Labastida Rivera F, Engwerda CR, Corcoran L, Komietani K, Kurosaki T, Smyth GK, Shi W, Kallies A

**Species**  
Mouse

**Dilution**  
1:300

**Year**  
2020

#### Nature immunology

#### Innate lymphoid cells mediate influenza-induced airway hyper-reactivity independently of adaptive immunity.

"Published figure using IL-33R (ST2) monoclonal antibody (Product # 46-9333-82) in Flow Cytometry"

Authors: Chang YJ, Kim HY, Albacker LA, Baumgarth N, McKenzie AN, Smith DE, Dekruyff RH, Umetsu DT

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2011

[View more Flow references on thermofisher.com](#)

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