

Technical Data Sheet

InVivoMAb anti-mouse IL-33R (ST2)



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Lot Specific Information

Lot Number: Lot Specific*
Volume: Lot Specific*
Concentration: Lot Specific* (generally 4 to 11 mg/ml) *
Total Protein: Lot Specific*

*This information will be noted on the certificate of analysis that ships with this product.

Product Website Link: <https://bioxcell.com/invivomab-anti-mouse-il-33r-st2-be0510>

Product Information

Catalog Number: BE0510
Clone: BXC-06E01
Isotype: Rat IgG2a, κ
Recommended Isotype Control(s): InVivoMAb rat IgG2a isotype control, anti-trinitrophenol
Recommended Dilution Buffer: InVivoPure pH 7.0 Dilution Buffer
Immunogen: Recombinant mouse IL-33R (ST2)
Reported Applications: *in vitro* neutralization of mouse IL-33R (ST2)
Functional assays
ELISA
Western blot
For details on *in vivo* applications, please contact
technicalservice@bioxcell.com
Formulation: PBS, pH 7.0
Contains no stabilizers or preservatives
Endotoxin: $\leq 1\text{EU/mg}$ ($\leq 0.001\text{EU}/\mu\text{g}$)
Determined by LAL assay
Purity: $\geq 95\%$
Determined by SDS-PAGE
Sterility: $0.2\ \mu\text{m}$ filtered
Production: Purified from cell culture supernatant in an animal-free facility
Purification: Protein G
Molecular Weight: 150 kDa

Description

The BXC-06E01 monoclonal antibody reacts with mouse ST2 (suppressor of tumorigenicity 2), which is also referred to as interleukin-33 receptor (IL-33R), interleukin 1 receptor-like 1 (IL1RL1), DER4, and FIT-1. ST2 is a transmembrane protein that functions as a receptor for IL-33, which belongs to the IL-1 cytokine family. ST2 is expressed by T lymphocytes, macrophages, mast cells, activated Th2 lymphocytes, group 2 innate lymphoid cells (ILC2), cardiac myocytes, endothelial cells, and epithelial cells. In conjunction with co-receptor IL1RAP, the interaction between ST2 and IL-33 plays an essential role in innate and adaptive immunity, thereby aiding in tissue homeostasis and responses to stress. Once the IL-33/ST2/IL1RAP complex is assembled and stimulated, it recruits adaptor proteins like MyD88, IRAK1, IRAK4, and TRAF6 to initiate the activation of NF- κ B and MAPK/ERK inflammatory and immunological pathways. ST2 exists as a transmembrane or membrane-bound cell-surface receptor (ST2L) and also as the circulating "decoy" receptor known as soluble ST2 (sST2), which blocks IL-33's ability to signal through ST2L. The ST2 signaling axis is associated with the pathophysiology of allergic inflammation, asthma, fibrosis, autoimmune disease, inflammatory bowel disease (IBD), rheumatoid arthritis (RA), cancer, and certain central nervous system disorders. In *in vitro* or *in vivo* preclinical studies, the neutralization of ST2 using antibodies is a great strategy to block ST2-driven type 2 immunity, elucidate ST2-dependent myeloid/lymphoid biology, and

evaluate whether inhibiting this axis improves anti-tumor immunity or mitigates pathological inflammation.

Storage

Store at the stock concentration at 4°C . **Do not freeze.**

It is not uncommon for a floccule or precipitate to appear during storage. The floccule is typically buffer salts precipitating out of solution or a small bit of protein aggregation. For information on how to remove floccules or precipitates see our FAQ's at <https://bioxcell.com/faqs>.

Protocol Information

Since applications vary, each investigator should use the application references as a guide to help estimate the appropriate dose or concentration. The dose or concentration can be further optimized experimentally in a dose response or titration experiment.

Application References

For a complete list of references, visit https://bioxcell.com/invivomab-anti-mouse-il-33r-st2-be0510?utm_source=cr9k1b#tab_references or scan the QR code below.



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