



RayBiotech, Inc.

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Certificate of Analysis and Data Sheet

Mouse Anti-STIM1

With HRP-conjugated Secondary Antibody

Catalog No.
DS-MB-03554

Target Species
Synthetic Peptide

Isotype
IgG1

Preparation

Synonyms: SIM

Purification: Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

Immunogen: Synthetic peptide corresponding to the C-terminal intracellular region of STIM1.

Specificity

DS-MB-03554 recognizes STIM1 (stromal interaction molecule 1), a ubiquitously expressed 84kDa highly hydrophobic type I transmembrane protein, which acts as an essential component of store-operated Ca^{2+} (SOC) channel function, and hence normal cell function.

STIM1 acts as a calcium sensor which, in response to depletion in the intracellular calcium store, translocates from the endoplasmic reticulum (ER) to the plasma membrane and activates calcium release-activated calcium (CRAC) channels.

Species Cross Reactivity: Reacts with Rat, Mouse

N.B. Antibody reactivity and working conditions may vary between species.

Formulation

Product Type: Monoclonal Antibody

Product Form: Purified IgG - liquid

Buffer Solution: Phosphate buffered saline pH7.4

Approx. Protein Concentrations: IgG concentration 1.0mg/ml

Preservative Stabilizers: 0.09% Sodium Azide (NaN_3)

Storage

Store at $+4^{\circ}C$ or at $-20^{\circ}C$ if preferred.

Storage in frost-free freezers is not recommended.

This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life: 18 months from date of dispatch.

**The products are furnished for LABORATORY RESEARCH USE ONLY.
Not for diagnostic or therapeutic use.**



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Applications

<div>Options</div> <div>Functions</div>	YES	NO	Not determined	Recommended Work dilution or concentration
Immunoprecipitation	•			
Western Blotting (1)	•			1 - 2ug/ml
Elisa			•	

Note: Other applications are not tested yet. Optimal dilutions should be determined.

(1) This antibody detects a band of approximately 84kDa in RBL rat basophilic leukemia cell lysates.

Secondary Antibody Applications

<div>Options</div> <div>Functions</div>	YES	NO	Not determined	Recommended Work dilution or concentration
Immunoassay (ELISA, Western blot)	•			1:5,000-1:10,000

References

1. Zhang, S.L. *et al.* (2005) STIM1 is a Ca^{2+} sensor that activates CRAC channels and migrates from the Ca^{2+} store to the plasma membrane. *Nature*. 437: 902-905.

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