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Datasheet for 600-401-C02

STIM1 Antibody

Overview

Description:	Anti-STIM1 (RABBIT) Antibody - 600-401-C02
Item No.:	600-401-C02
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	In T lymphocytes, the sole pathway for Ca++ entry following antigen-receptor binding is through store-operated Ca++-release-activated Ca++ (CRAC) channels. These channels are made up of the pore-forming subunit ORAI1 and the stromal interaction molecule 1 (STIM1), a protein that functions as a Ca++ sensor and activates the CRAC channels, migrating to the plasma membrane from endoplasmic reticulum (ER)-like sites which act as the Ca++ store. A related molecule, STIM2, acts to inhibit the STIM1-mediated store-operated Ca++ entry, and can form complexes with STIM1, suggesting they may play a coordinated role in controlling Ca++ entry. Anti-STIM1 antibody is ideal for investigators involved in enzyme research.
Synonyms:	STIM1, Stromal interaction molecule 1, GOK
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	STIM1
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide
Immunogen:	STIM1 Antibody was produced from whole rabbit serum prepared by repeated immunizations with a peptide near the c-terminus of human STIM1.

Purity/Specificity:	Anti-STIM1 Antibody was affinity purified from monospecific antiserum by immunoaffinity purification. At least two isoforms of human STIM1 protein are known to exist. This affinity purified antibody will detect only the larger of the two isoforms. This STIM1 antibody is predicted to have no cross-reactivity to STIM2. The STIM1 gene is conserved in chimpanzee, dog, cow, mouse, rat, zebrafish, fruit fly, mosquito, and C.elegans. This antibody reacts with STIM1 from human, mouse, and rat sources. Reactivity with STIM1 from other sources has not been determined.
Relevant Links:	• UniProtKB - Q13586 • NCBI - NP_003147.2 • GeneID - 6786

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	This A-STIM1 antibody has been tested for use in ELISA, WB, IF, and IHC. Specific conditions for reactivity should be optimized by the end user. Expect a band at ~74 kDa in size corresponding to STIM1 by western blotting in the appropriate cell lysate or extract. Mouse thymus tissue lysate or human spleen tissue lysate can be used as positive control.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:40,000
IF:	User Optimized
IHC:	2.5 µg/mL
WB:	1.0 - 2.0 µg/mL

Formulation

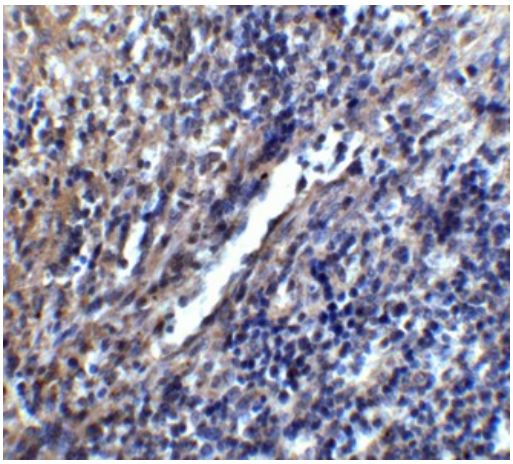
Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

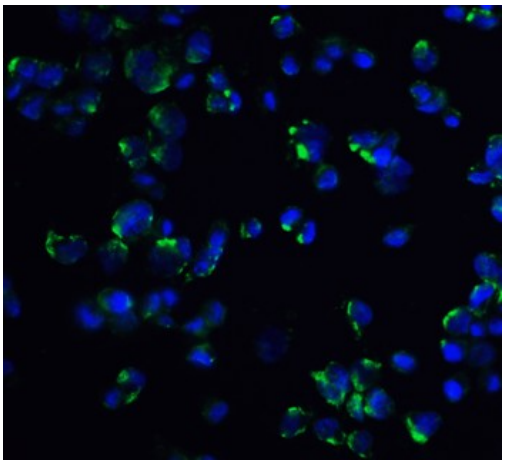
Shipping Condition:	Dry Ice

Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

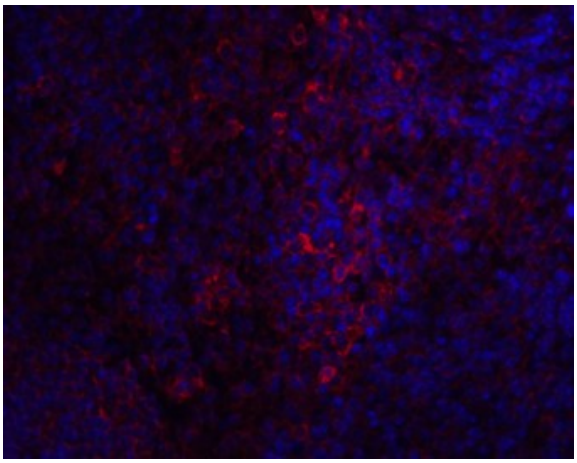
Images



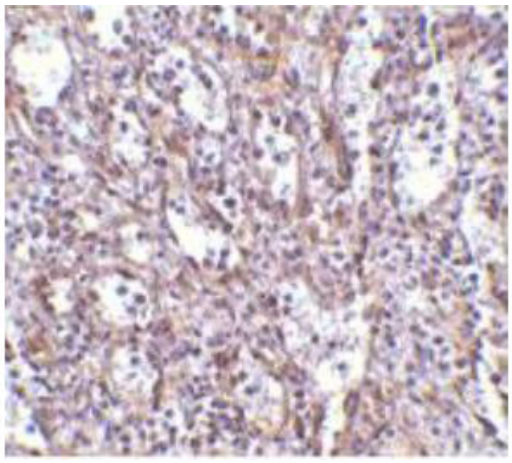
Immunohistochemistry
Immunohistochemistry of STIM1 in mouse spleen tissue with STIM1 antibody at 5 µg/ml.



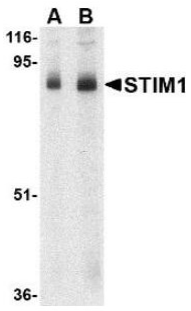
Immunofluorescence Microscopy
Immunofluorescence of STIM1 in mouse spleen tissue with STIM1 antibody at 20 µg/mL.
Green: STIM1 Antibody.
Blue: DAPI staining.



Immunofluorescence Microscopy
Immunofluorescence of STIM1 in HEK293 cells with STIM1 antibody at 20 µg/mL.
Red: STIM1 Antibody.
Blue: DAPI staining.



Immunohistochemistry
Immunohistochemistry showing detection of STIM1 in human spleen tissue; primary antibody anti-Stim-1 was used at 2.5 µg/mL.



Western Blot
Western blot of STIM1 Antibody. Lane A: mouse thymus tissue lysate STIM1 antibody used at 1.0 µg/mL. Lane B: mouse thymus tissue lysate STIM1 antibody used at 2.0 µg/mL. Load: 35 µg per lane. Primary Antibody: Anti-STIM-1 at designated amounts. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C.

Disclaimer

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