

Product datasheet

Anti-Stromal interaction molecule 1 antibody ab62031

★★★★☆ 2 Abreviews 3 References 5 Images

Overview

Product name	Anti-Stromal interaction molecule 1 antibody
Description	Rabbit polyclonal to Stromal interaction molecule 1
Host species	Rabbit
Specificity	ab62031 detects the larger isoform of Stromal interaction molecule 1 only. It is predicted to have no cross-reactivity with Stromal interaction molecule 2.
Tested applications	Suitable for: ICC/IF, WB, IHC-P
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Raised against a 24 amino acid synthetic peptide from near the carboxy terminus of Human Stromal interaction molecule 1 (GenBank accession no. NP_003147).
Positive control	Mouse thymus tissue lysate
General notes	<p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.</p> <p>In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.</p> <p>Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.</p> <p>Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C.
Storage buffer	pH: 7.2 Preservative: 0.02% Sodium azide Constituent: PBS
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab62031** in the following tested applications.

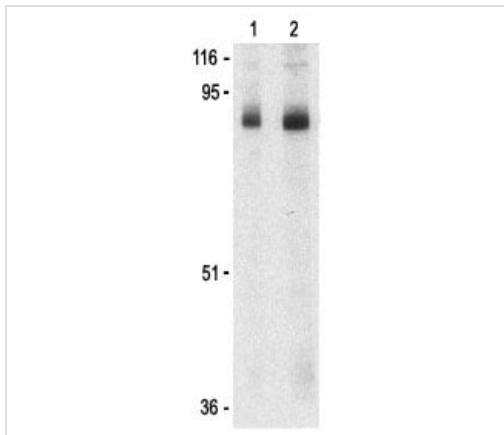
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF	★☆☆☆☆	Use at an assay dependent concentration.
WB	★★★★★	Use a concentration of 1 - 2 µg/ml. Detects a band of approximately 90 kDa (predicted molecular weight: 77 kDa).
IHC-P		Use a concentration of 2.5 µg/ml.

Target

Function	Plays a role in mediating Ca(2+) influx following depletion of intracellular Ca(2+) stores. Acts as Ca(2+) sensor in the endoplasmic reticulum via its EF-hand domain. Upon Ca(2+) depletion, translocates from the endoplasmic reticulum to the plasma membrane where it activates the Ca(2+) release-activated Ca(2+) (CRAC) channel subunit, TMEM142A/ORAI1.
Tissue specificity	Ubiquitously expressed in various human primary cells and tumor cell lines.
Involvement in disease	Defects in STIM1 are the cause of immune dysfunction with T-cell inactivation due to calcium entry defect type 2 (IDTICED2) [MIM:612783]. IDTICED2 is an immune disorder characterized by recurrent infections, impaired T-cell activation and proliferative response, decreased T-cell production of cytokines, lymphadenopathy, and normal lymphocytes counts and serum immunoglobulin levels. Additional features include thrombocytopenia, autoimmune hemolytic anemia, non-progressive myopathy, partial iris hypoplasia, hepatosplenomegaly and defective enamel dentition.
Sequence similarities	Contains 1 EF-hand domain. Contains 1 SAM (sterile alpha motif) domain.
Domain	The microtubule tip localization signal (MtLS) motif; mediates interaction with MAPRE1 and targeting to the growing microtubule plus ends.
Post-translational modifications	Glycosylation is required for cell surface expression. Phosphorylated predominantly on Ser residues.
Cellular localization	Cell membrane. Endoplasmic reticulum membrane. Cytoplasm > cytoskeleton. Translocates from the endoplasmic reticulum to the cell membrane in response to a depletion of intracellular calcium. Associated with the microtubule network at the growing distal tip of microtubules.

Images



Western blot - Anti-Stromal interaction molecule 1 antibody (ab62031)

Lane 1 : Anti-Stromal interaction molecule 1 antibody (ab62031) at 1 µg/ml

Lane 2 : Anti-Stromal interaction molecule 1 antibody (ab62031) at 2 µg/ml

All lanes : Mouse thymus tissue lysate

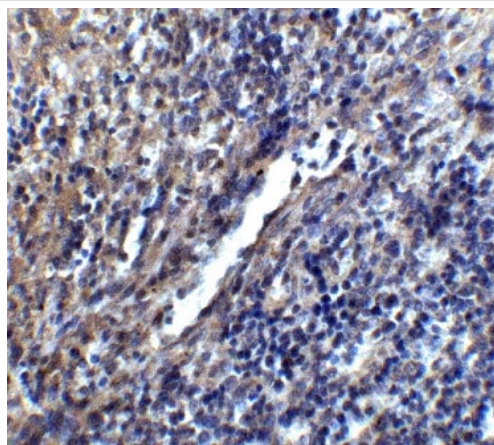
Lysates/proteins at 15 µg per lane.

Predicted band size: 77 kDa

Observed band size: 90 kDa

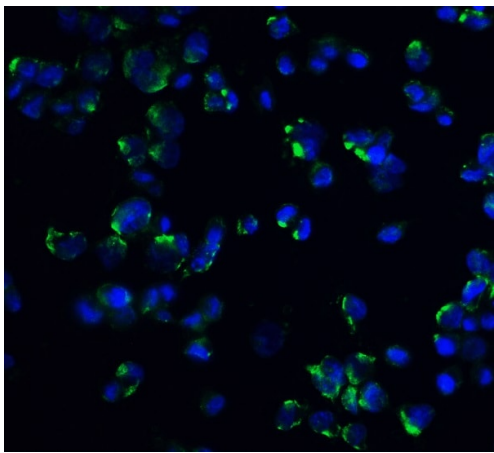
[why is the actual band size different from the predicted?](#)

Additional bands at: 116 kDa. We are unsure as to the identity of these extra bands.



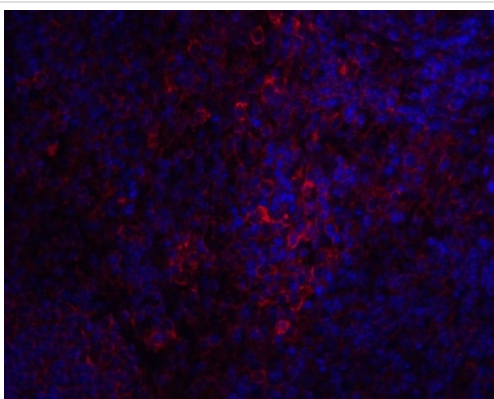
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Stromal interaction molecule 1 antibody (ab62031)

Immunohistochemistry (Formalin-fixed paraffin embedded sections) of mouse spleen tissue labeling Stromal interaction molecule 1 with Anti-Stromal interaction molecule 1 antibody (ab62031) at 5µg/ml.



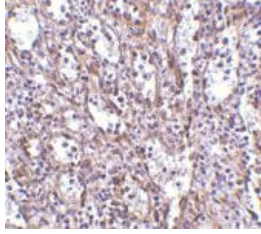
Immunofluorescence of Stromal interaction molecule 1 in mouse spleen cells with ab62031 at 20 $\mu\text{g}/\text{mL}$.

Immunocytochemistry/ Immunofluorescence - Anti-Stromal interaction molecule 1 antibody (ab62031)



Immunofluorescence of Stromal interaction molecule 1 in Hek293 cells with ab62031 at 20 $\mu\text{g}/\text{mL}$.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Stromal interaction molecule 1 antibody (ab62031)



ab62031 at 2.5 µg/ml staining Stromal interaction molecule 1 in human spleen tissue section by Immunohistochemistry (Formalin/PFA fixed paraffin-embedded tissue sections).

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Stromal interaction molecule 1 antibody (ab62031)

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