

Product datasheet

Anti-Stromal interaction molecule 1 antibody [5A2] ab57834

★★★★☆ [11 Abreviews](#) [12 References](#) [5 Images](#)

Overview

Product name	Anti-Stromal interaction molecule 1 antibody [5A2]
Description	Mouse monoclonal [5A2] to Stromal interaction molecule 1
Host species	Mouse
Tested applications	Suitable for: WB, IHC-P, ICC, Flow Cyt, IP, ICC/IF
Species reactivity	Reacts with: Human
Immunogen	Recombinant full length protein, corresponding to amino acids 24-686 of Human Stromal interaction molecule 1
General notes	<p>This product was changed from ascites to tissue culture supernatant on 12/3/19. Please note that the dilutions may need to be adjusted accordingly. If you have any questions, please do not hesitate to contact our scientific support team.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>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, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	pH: 7.4
Purity	Tissue culture supernatant
Clonality	Monoclonal
Clone number	5A2
Isotype	IgG2a
Light chain type	kappa

Applications

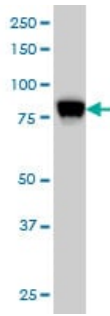
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab57834 in the following tested applications.

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

Application	Abreviews	Notes
WB	★★★★☆ (5)	Use at an assay dependent concentration. Predicted molecular weight: 77 kDa.
IHC-P		Use at an assay dependent concentration.
ICC	★★★★★ (1)	Use at an assay dependent concentration.
Flow Cyt		Use at an assay dependent concentration. ab170191 - Mouse monoclonal IgG2a, is suitable for use as an isotype control with this antibody.
IP	★★★★★ (2)	Use at an assay dependent concentration.
ICC/IF	★★★★★ (3)	Use at an assay dependent concentration.

Target

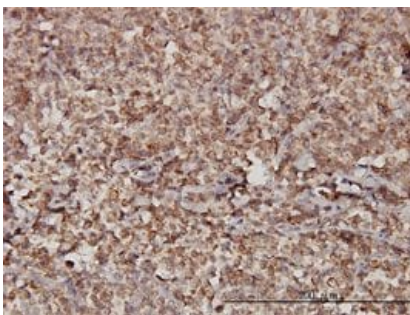
Function	Plays a role in mediating Ca(2+) influx following depletion of intracellular Ca(2+) stores. Acts as Ca(2+) sensor in the endoplasmic reticulum via its EF-hand domain. Upon Ca(2+) depletion, translocates from the endoplasmic reticulum to the plasma membrane where it activates the Ca(2+) release-activated 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.



Western blot - Anti-Stromal interaction molecule 1 antibody (ab57834)

Stromal interaction molecule 1 antibody (ab57834) at 1ug/lane + HeLa cell lysate at 25ug/lane.

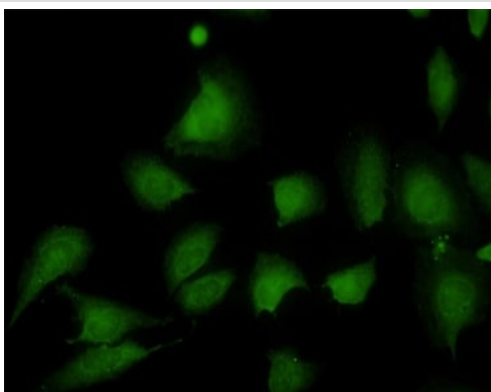
This image was generated using the ascites version of the product.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Stromal interaction molecule 1 antibody (ab57834)

Stromal interaction molecule 1 antibody (ab57834) used in immunohistochemistry at 3ug/ml on formalin fixed and paraffin embedded human malignant lymphoma, diffuse large B.

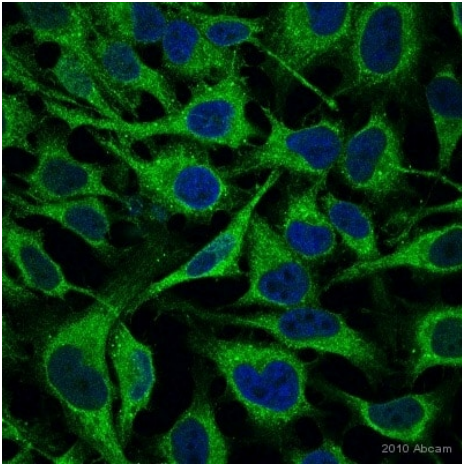
This image was generated using the ascites version of the product.



Immunocytochemistry/ Immunofluorescence - Anti-Stromal interaction molecule 1 antibody (ab57834)

ab57834 at 10 ug/ml staining Stromal interaction molecule 1 in human Hella cells by Immunocytochemistry/ Immunofluorescence.

This image was generated using the ascites version of the product.



Immunocytochemistry/ Immunofluorescence - Anti-Stromal interaction molecule 1 antibody (ab57834)

This image is courtesy of an anonymous Abreview

Flow Cytometry - Anti-Stromal interaction molecule 1 antibody (ab57834)

ab57834 staining the stromal interaction molecule in HeLa cells by immunocytochemistry/immunofluorescence (ICC/IF). Cells were fixed with paraformaldehyde and permeabilized with 0.5% TritonX. Samples were incubated with primary antibody (1/200) for 1 hour at 24°C. An Alexa Fluor® 488-conjugated chicken anti-mouse polyclonal (1/1000) was used as the secondary.

This image was generated using the ascites version of the product.

Overlay histogram showing HeLa cells stained with ab57834 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab57834, 0.5µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) ([ab96879](#)) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG2a [ICIGG2A] ([ab91361](#), 1µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed.

This image was generated using the ascites version of the product.

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