

Stromal interaction molecule 1 Antibody
Rabbit mAb
Catalog # AP90887**Specification**

Stromal interaction molecule 1 Antibody - Product Information

Application	WB, IHC, IP
Primary Accession	Q13586
Reactivity	Rat
Clonality	Monoclonal
Other Names	
GOK; SIM; STIM 1; Stim1 stromal interaction molecule 1; STIM1L; Stromal interaction molecule 1;	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	77423 Da

Stromal interaction molecule 1 Antibody - Additional Information

Dilution	WB~~1:1000 IHC~~1:100~500 IP~~N/A
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Stromal interaction molecule 1
Description	STIM1 is a potential tumor suppressor; defects in STIM1 may cause rhabdomyosarcoma and rhabdoid tumors. STIM1 can either homodimerize or form heterodimers with STIM2. STIM2 possesses a high sequence identity to STIM1 and can function as an inhibitor of STIM1-mediated plasma membrane store-operated Ca ²⁺ entry. However, further investigation is required to elucidate the true physiological function of STIM2.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Stromal interaction molecule 1 Antibody - Protein Information**Name** STIM1**Synonyms** GOK {ECO:0000303|PubMed:9377559}**Function**

Acts as a Ca^{2+} sensor that gates two major inward rectifying Ca^{2+} channels at the plasma membrane: Ca^{2+} release- activated Ca^{2+} (CRAC) channels and arachidonate-regulated Ca^{2+} - selective (ARC) channels (PubMed:[15866891](http://www.uniprot.org/citations/15866891) PubMed:[16005298](http://www.uniprot.org/citations/16005298) PubMed:[16208375](http://www.uniprot.org/citations/16208375) PubMed:[16537481](http://www.uniprot.org/citations/16537481) PubMed:[16733527](http://www.uniprot.org/citations/16733527) PubMed:[16766533](http://www.uniprot.org/citations/16766533) PubMed:[16807233](http://www.uniprot.org/citations/16807233) PubMed:[18854159](http://www.uniprot.org/citations/18854159) PubMed:[19182790](http://www.uniprot.org/citations/19182790) PubMed:[19249086](http://www.uniprot.org/citations/19249086) PubMed:[19622606](http://www.uniprot.org/citations/19622606) PubMed:[19706554](http://www.uniprot.org/citations/19706554) PubMed:[22464749](http://www.uniprot.org/citations/22464749) PubMed:[24069340](http://www.uniprot.org/citations/24069340) PubMed:[24351972](http://www.uniprot.org/citations/24351972) PubMed:[24591628](http://www.uniprot.org/citations/24591628) PubMed:[25326555](http://www.uniprot.org/citations/25326555) PubMed:[26322679](http://www.uniprot.org/citations/26322679) PubMed:[28219928](http://www.uniprot.org/citations/28219928) PubMed:[32415068](http://www.uniprot.org/citations/32415068) PubMed:[32415068](http://www.uniprot.org/citations/32415068)). Plays a role in mediating store- operated Ca^{2+} entry (SOCE), a Ca^{2+} influx following depletion of intracellular Ca^{2+} stores. Upon Ca^{2+} depletion, translocates from the endoplasmic reticulum to the plasma membrane where it activates CRAC channel pore-forming subunits ORA1, ORA2 and ORA3 to generate sustained and oscillatory Ca^{2+} entry (PubMed:[16208375](http://www.uniprot.org/citations/16208375) PubMed:[16537481](http://www.uniprot.org/citations/16537481) PubMed:[32415068](http://www.uniprot.org/citations/32415068)). Involved in enamel formation (PubMed:[24621671](http://www.uniprot.org/citations/24621671) PubMed:[24621671](http://www.uniprot.org/citations/24621671)).

Cellular Location

Cell membrane; Single-pass type I membrane protein. Endoplasmic reticulum membrane; Single-pass type I membrane protein. Cytoplasm, cytoskeleton. Sarcoplasmic reticulum. Note=Translocates from the endoplasmic reticulum to the cell membrane in response to a depletion of intracellular calcium and is detected at punctae corresponding to junctions between the endoplasmic reticulum and the cell membrane (PubMed:16005298, PubMed:16208375, PubMed:18854159, PubMed:19182790, PubMed:19249086). Associated with the microtubule network at the growing distal tip of microtubules (PubMed:19632184). Colocalizes with ORA1 at the cell membrane (PubMed:27185316). Colocalizes preferentially with CASQ1 at endoplasmic reticulum in response to a depletion of intracellular calcium (PubMed:27185316)

Tissue Location

Ubiquitously expressed in various human primary cells and tumor cell lines.

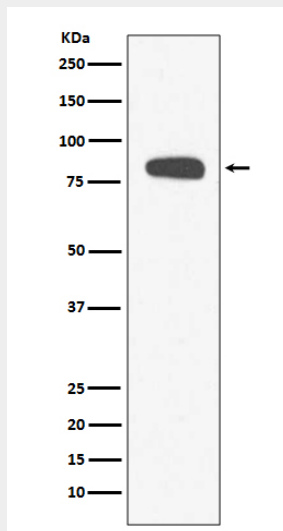
Stromal interaction molecule 1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)

- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Stromal interaction molecule 1 Antibody - Images



Western blot analysis of Stromal interaction molecule 1 expression in HeLa cell lysate.