

**KD-Validated Anti-Stromal interaction molecule 1 Rabbit Monoclonal Antibody**  
**Rabbit monoclonal antibody**  
**Catalog # AGI1285****Specification****KD-Validated Anti-Stromal interaction molecule 1 Rabbit Monoclonal Antibody - Product Information**

Application	WB, FC, ICC
Primary Accession	<a href="#">Q13586</a>
Clonality	Monoclonal
Isotype	Rabbit IgG
Calculated MW	Predicted, 77 kDa, observed, 77 kDa KDa
Gene Name	STIM1
Aliases	STIM1; Stromal Interaction Molecule 1; GOK; D11S4896E; IMD10; STRMK; TAM1; TAM
Immunogen	A synthesized peptide derived from human Stromal interaction molecule 1

**KD-Validated Anti-Stromal interaction molecule 1 Rabbit Monoclonal Antibody - Additional Information****Gene ID** 6786**Other Names**

Stromal interaction molecule 1, STIM1, GOK {ECO:0000303|PubMed:9377559}

**KD-Validated Anti-Stromal interaction molecule 1 Rabbit Monoclonal 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:<a href="http://www.uniprot.org/citations/15866891" target="\_blank">15866891</a>, PubMed:<a href="http://www.uniprot.org/citations/16005298" target="\_blank">16005298</a>, PubMed:<a href="http://www.uniprot.org/citations/16208375" target="\_blank">16208375</a>, PubMed:<a href="http://www.uniprot.org/citations/16537481" target="\_blank">16537481</a>, PubMed:<a href="http://www.uniprot.org/citations/16733527" target="\_blank">16733527</a>, PubMed:<a href="http://www.uniprot.org/citations/16766533" target="\_blank">16766533</a>, PubMed:<a href="http://www.uniprot.org/citations/16807233" target="\_blank">16807233</a>, PubMed:<a href="http://www.uniprot.org/citations/18854159" target="\_blank">18854159</a>, PubMed:<a href="http://www.uniprot.org/citations/19182790" target="\_blank">19182790</a>, PubMed:<a href="http://www.uniprot.org/citations/19249086" target="\_blank">19249086</a>, PubMed:<a href="http://www.uniprot.org/citations/19622606" target="\_blank">19622606</a>, PubMed:<a href="http://www.uniprot.org/citations/19706554" target="\_blank">19706554</a>)

target="\_blank">>19706554</a>, PubMed:<a href="http://www.uniprot.org/citations/22464749" target="\_blank">22464749</a>, PubMed:<a href="http://www.uniprot.org/citations/24069340" target="\_blank">24069340</a>, PubMed:<a href="http://www.uniprot.org/citations/24351972" target="\_blank">24351972</a>, PubMed:<a href="http://www.uniprot.org/citations/24591628" target="\_blank">24591628</a>, PubMed:<a href="http://www.uniprot.org/citations/25326555" target="\_blank">25326555</a>, PubMed:<a href="http://www.uniprot.org/citations/26322679" target="\_blank">26322679</a>, PubMed:<a href="http://www.uniprot.org/citations/28219928" target="\_blank">28219928</a>, PubMed:<a href="http://www.uniprot.org/citations/32415068" target="\_blank">32415068</a>). 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:<a href="http://www.uniprot.org/citations/16208375" target="\_blank">16208375</a>, PubMed:<a href="http://www.uniprot.org/citations/16537481" target="\_blank">16537481</a>, PubMed:<a href="http://www.uniprot.org/citations/32415068" target="\_blank">32415068</a>). Involved in enamel formation (PubMed:<a href="http://www.uniprot.org/citations/24621671" target="\_blank">24621671</a>).

### 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

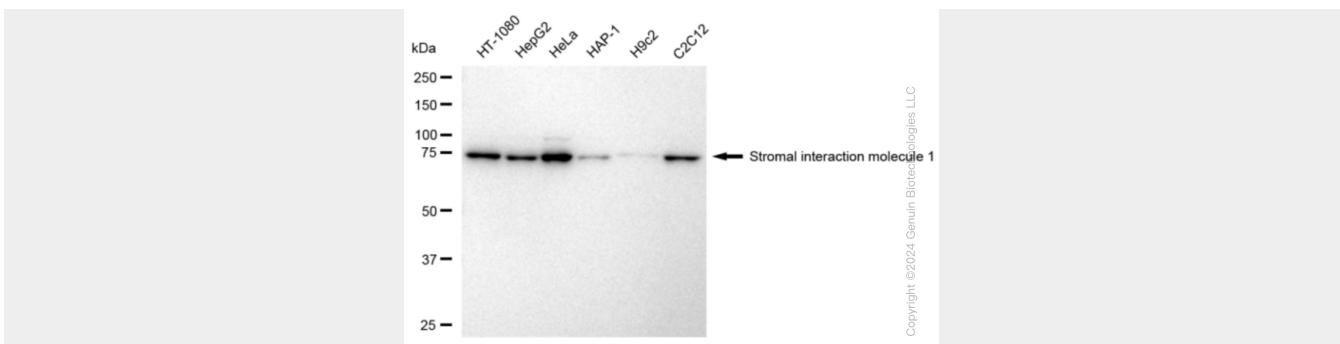
Ubiquitously expressed in various human primary cells and tumor cell lines.

### KD-Validated Anti-Stromal interaction molecule 1 Rabbit Monoclonal Antibody - Protocols

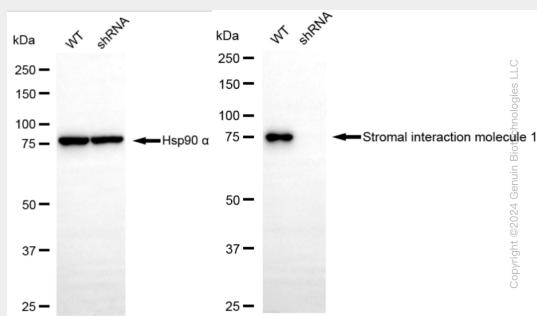
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

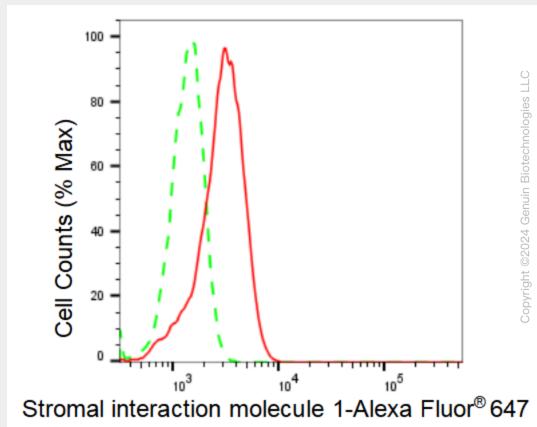
### KD-Validated Anti-Stromal interaction molecule 1 Rabbit Monoclonal Antibody - Images



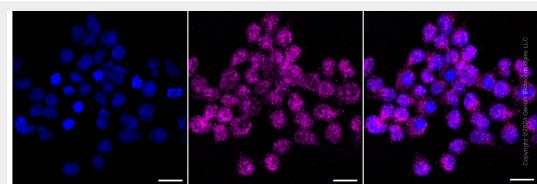
Western blotting analysis using anti-Stromal interaction molecule 1 antibody (Cat#AGI1285). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Stromal interaction molecule 1 antibody (Cat#AGI1285, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-Stromal interaction molecule 1 antibody (Cat#AGI1285). Stromal interaction molecule 1 expression in wild type (WT) and stromal interaction molecule 1 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with anti-Stromal interaction molecule 1 antibody (Cat#AGI1285, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Stromal interaction molecule 1 expression in HeLa cells using Stromal interaction molecule 1 antibody (Cat#AGI1285, 1:2,000). Green, isotype control; red, Stromal interaction molecule 1.



Immunocytochemical staining of HeLa cells with Stromal interaction molecule 1 antibody (Cat#AGI1285, 1:1,000). Nuclei were stained blue with DAPI; Stromal interaction molecule 1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.