

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	Q13586
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:15866891, PubMed:16005298, PubMed:16208375, PubMed:16537481, PubMed:16733527, PubMed:16766533, PubMed:16807233, PubMed:18854159, PubMed:19182790, PubMed:19249086, PubMed:19622606, PubMed:19706554)

target="_blank">19706554, PubMed:22464749, PubMed:24069340, PubMed:24351972, PubMed:24591628, PubMed:25326555, PubMed:26322679, PubMed:28219928, PubMed: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, PubMed:16537481, PubMed:32415068). Involved in enamel formation (PubMed: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

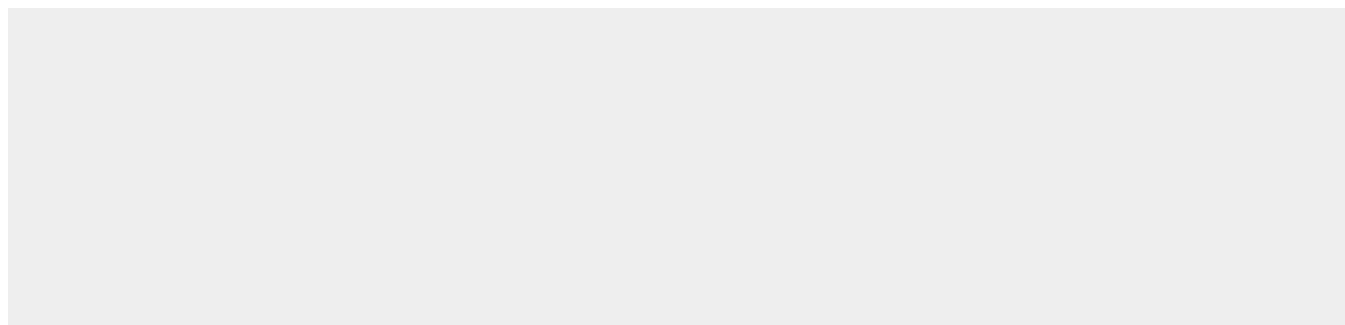
Ubiquitously expressed in various human primary cells and tumor cell lines.

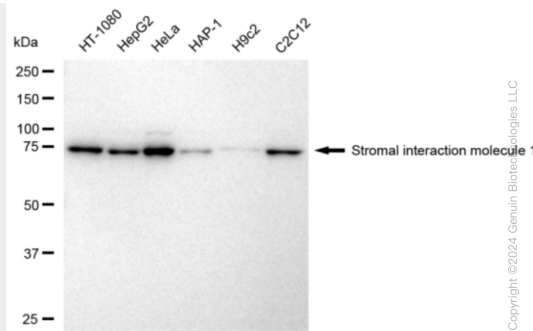
KD-Validated Anti-Stromal interaction molecule 1 Rabbit Monoclonal Antibody - Protocols

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

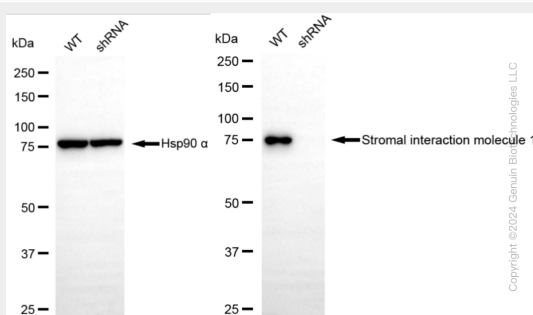
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

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

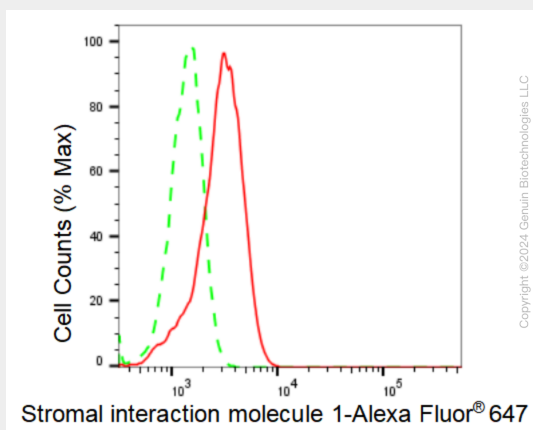




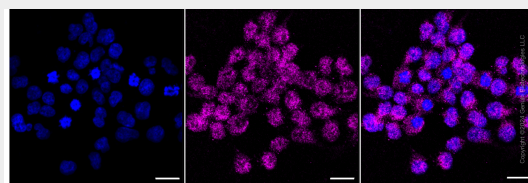
Western blotting analysis using anti-Stromal interaction molecule 1 antibody (Cat#AGI1285). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Stromal interaction molecule 1 antibody (Cat#AGI1285, 1:5,000) and HRP-conjugated goat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