
Product Name: KD-Validated Stromal Interaction Molecule 1 Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA01476**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 77.4kDa

Antigen Information

Gene Name	STIM1
Alternative Names	STIM1; Stromal Interaction Molecule 1; GOK; D11S4896E; IMD10; STRMK; TAM1; TAM
Gene ID	6786.0
SwissProt ID	Q13586
Immunogen	A synthesized peptide derived from human Stromal interaction molecule 1

Background

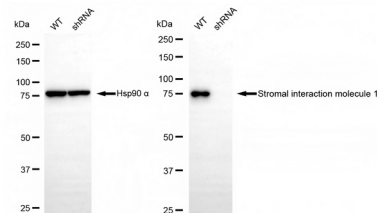
This gene encodes a type 1 transmembrane protein that mediates Ca²⁺ influx after depletion of intracellular Ca²⁺ stores by gating of store-operated Ca²⁺ influx channels (SOCs). It is one of several genes located in the imprinted gene domain of 11p15.5, an important tumor-suppressor gene region. Alterations in this region have been associated with the Beckwith-

Wiedemann syndrome, Wilms tumor, rhabdomyosarcoma, adrenocortical carcinoma, and lung, ovarian, and breast cancer. This gene may play a role in malignancies and disease that involve this region, as well as early hematopoiesis, by mediating attachment to stromal cells. Mutations in this gene are associated with fatal classic Kaposi sarcoma, immunodeficiency due to defects in store-operated calcium entry (SOCE) in fibroblasts, ectodermal dysplasia and tubular aggregate myopathy. This gene is oriented in a head-to-tail configuration with the ribonucleotide reductase 1 gene (RRM1), with the 3' end of this gene situated 1.6 kb from the 5' end of the RRM1 gene. Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, May 2013]

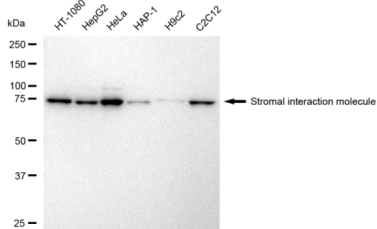
Research Area

Signal Transduction, Metabolism

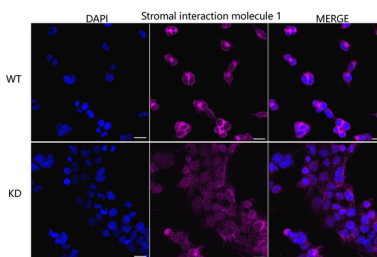
Image Data



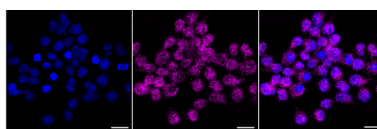
Western blotting analysis using stromal interaction molecule 1 antibody (KVA01476). Stromal interaction molecule 1 expression in wild type (WT) and stromal interaction molecule 1 (STIM1) shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with stromal interaction molecule 1 antibody (KVA01476, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



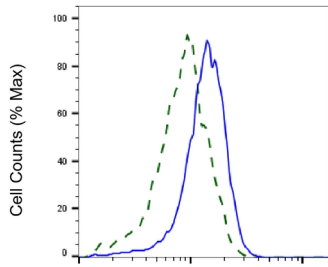
Western blotting analysis using Stromal interaction molecule 1 antibody (KVA01476). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Stromal interaction molecule 1 antibody (KVA01476, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HeLa cells using Stromal interaction molecule 1 antibody (KVA01476, 1:1,000), Top panel: wild-type (WT); Bottom panel: Stromal interaction molecule 1 shRNA knockdown (KD). Nuclei were stained blue with DAPI; Stromal interaction molecule 1 was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm.

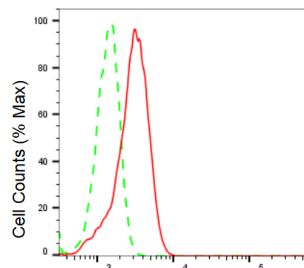


Immunocytochemical staining of HeLa cells with Stromal interaction molecule 1 antibody (KVA01476, 1:1,000). Nuclei were stained blue with DAPI; Stromal interaction molecule 1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.



Stromal interaction molecule 1-Alexa Fluor® 647

Validation of Stromal interaction molecule 1 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with Stromal interaction molecule 1 antibody (KVA01476, 1:2,000) and analyzed using BD flow cytometer.



Stromal interaction molecule 1-Alexa Fluor® 647

Flow cytometric analysis of Stromal interaction molecule 1 expression in HeLa cells using Stromal interaction molecule 1 antibody (KVA01476, 1:2,000). Green, isotype control; red, Stromal interaction molecule 1.