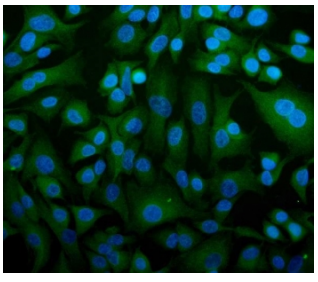
STIM1 Antibody (R32220)

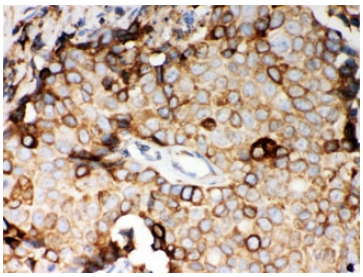
Catalog No.	Formulation	Size
R32220	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

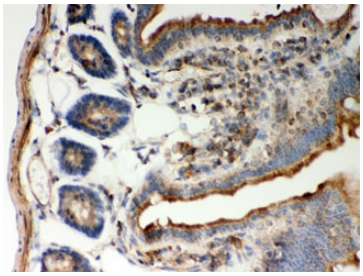
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	Q13586
Localization	Cytoplasmic, membrane
Applications	Western blot: 0.1-0.5ug/ml Immunohistochemistry (FFPE): 0.5-1ug/ml Immunofluorescence (FFPE): 2-4ug/ml Flow cytometry: 1-3ug/million cells
Limitations	This STIM1 antibody is available for research use only.



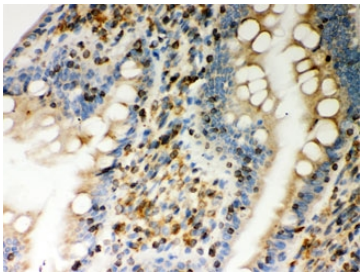
Immunofluorescent staining of FFPE human A549 cells with STIM1 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



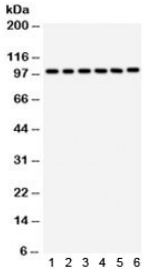
IHC testing of FFPE human breast cancer with STIM1 antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to staining.



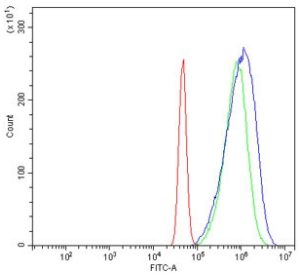
IHC testing of FFPE mouse intestine with STIM1 antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to staining.



IHC testing of FFPE rat intestine with STIM1 antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to staining.



Western blot testing of 1) rat liver, 2) mouse liver, 3) human placenta, 4) HeLa, 5) SMCC and 6) HepG2 lysate with STIM1 antibody. Predicted molecular weight ~77 kDa but may be observed at higher molecular weights due to glycosylation.



Flow cytometry testing of human A431 cells with STIM1 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= STIM1 antibody.

Description

Stromal interaction molecule 1 is a protein that in humans is encoded by the STIM1 gene. STIM1 has a single transmembranedomain, and is localized to the endoplasmic reticulum, and to a lesser extent to the plasma membrane. 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, adrenocrotical 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.

Application Notes

Optimal dilution of the STIM1 antibody should be determined by the researcher.

Immunogen

Amino acids AAEFCRIDKPLCHSEDEKLSFEAVRNIHKL of human STIM1 were used as the immunogen for the STIM1 antibody.

Storage

After reconstitution, the STIM1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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