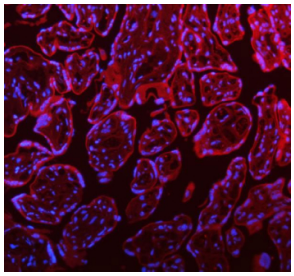
STIM1 Antibody / Stromal interaction molecule 1 (RQ8871)

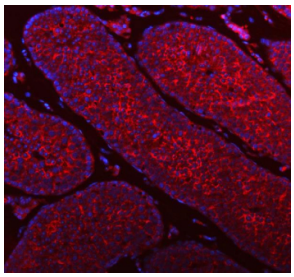
Catalog No.	Formulation	Size
RQ8871	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

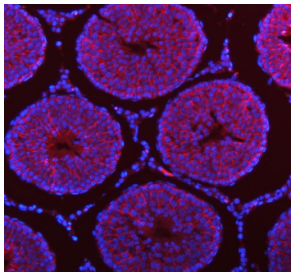
Availability	1-2 days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity chromatography
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q13586
Localization	Cytoplasm
Applications	Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Flow cytometry: 1-3ug/million cells Immunofluorescence: 5ug/ml ELISA: 0.1-0.5ug/ml
Limitations	This STIM1 antibody is available for research use only.



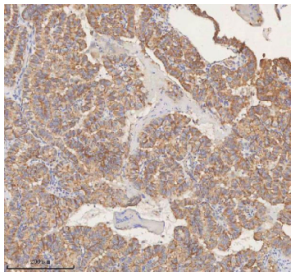
Immunofluorescent staining of FFPE human placental tissue with STIM1 antibody (red) and DAPI nuclear stain (blue). HIER: steam section in pH8 EDTA buffer for 20 min.



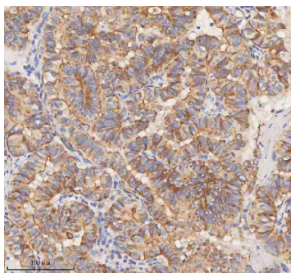
Immunofluorescent staining of FFPE human mouse testis tissue with STIM1 antibody (red) and DAPI nuclear stain (blue). HIER: steam section in pH8 EDTA buffer for 20 min.



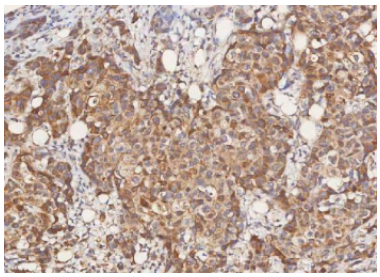
Immunofluorescent staining of FFPE human rat testis tissue with STIM1 antibody (red) and DAPI nuclear stain (blue). HIER: steam section in pH8 EDTA buffer for 20 min.



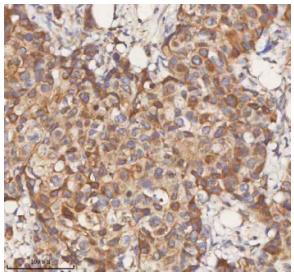
IHC staining of FFPE human thyroid papillary carcinoma tissue with STIM1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



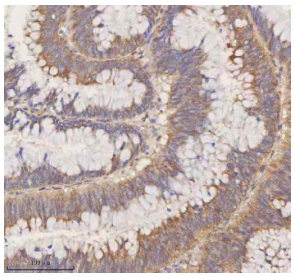
IHC staining of FFPE human thyroid papillary carcinoma tissue with STIM1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



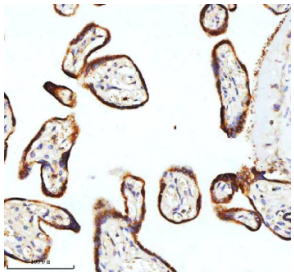
IHC staining of FFPE human breast cancer tissue with STIM1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



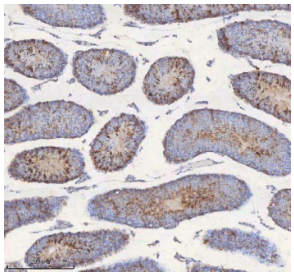
IHC staining of FFPE human breast cancer tissue with STIM1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



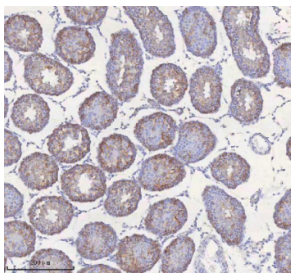
IHC staining of FFPE human colon adenocarcinoma tissue with STIM1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



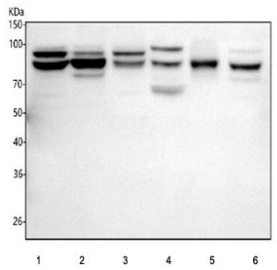
IHC staining of FFPE human placental tissue with STIM1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



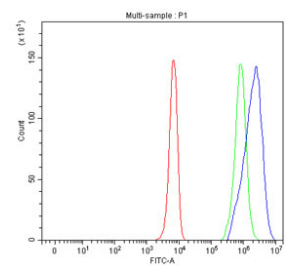
IHC staining of FFPE mouse testis tissue with STIM1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE rat testis tissue with STIM1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of 1) human K562, 2) human HepG2, 3) human HeLa, 4) rat PC-12, 5) rat liver and 6) rat NIH 3T3 cell lysate with STIM1 antibody. Predicted molecular weight ~77 kDa but may be observed at higher molecular weights due to glycosylation.



Flow cytometry testing of fixed and permeabilized human K562 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

An E.coli-derived human recombinant protein (amino acids E42-L599) was 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.

Copyright © NSJ Bioreagents. All rights reserved.