

Product datasheet for **AM03106PU-N**

Stromal interaction molecule 1 (STIM1) Mouse Monoclonal Antibody [Clone ID: CDN3H4]

Product data:

Product Type:	Primary Antibodies
Clone Name:	CDN3H4
Applications:	IF, IHC, IP, WB
Recommended Dilution:	Immunoprecipitation. Western Blotting (reducing and non-reducing conditions): 1 µg/ml <i>Positive Control:</i> RBL rat basophilic leukemia cell line <i>Sample Preparation:</i> Resuspend approx. 50 mil. cells in 1 ml cold Lysis buffer (1% laurylmaltoside in 20 mM Tris/Cl, 100 mM NaCl pH 8.2, 50 mM NaF including Protease inhibitor Cocktail). Incubate 60 min on ice. Centrifuge to remove cell debris. Mix lysate with non-reducing/reducing Laemmli SDS-PAGE sample buffer. Immunocytochemistry: <i>Staining Technique:</i> methanol-aceton fixation. <i>Positive Control:</i> HeLa human cervix carcinoma cell line. Immunohistochemistry on Paraffin Sections: 5 µg/ml. Heat induced antigen retrieval in pH 6.0 citrate buffer is recommended.
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Synthesized peptide (C-terminal cytoplasmic part of STIM1)
Specificity:	The antibody CDN3H4 reacts with Human and Rodent STIM1, a 84 kDa essential and conserved regulator of store-operated Ca ²⁺ channel function.
Formulation:	PBS, pH 7.4 State: Aff - Purified State: Liquid purified IgG fraction (> 95% pure by SDS-PAGE) Preservative: 15 mM Sodium Azide
Concentration:	lot specific
Purification:	Affinity Chromatography on Protein A
Conjugation:	Unconjugated



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Storage: Store undiluted at 2-8°C.
DO NOT FREEZE!

Stability: Shelf life: one year from despatch.

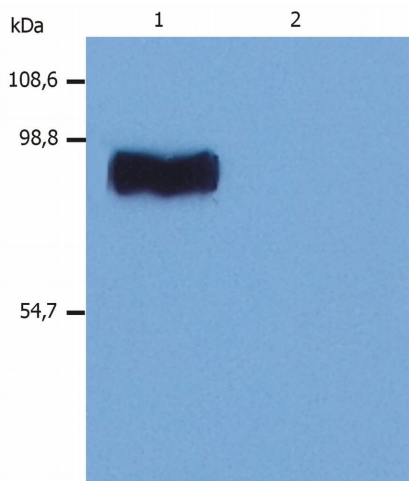
Gene Name: stromal interaction molecule 1

Database Link: [Entrez Gene 6786 Human Q13586](#)

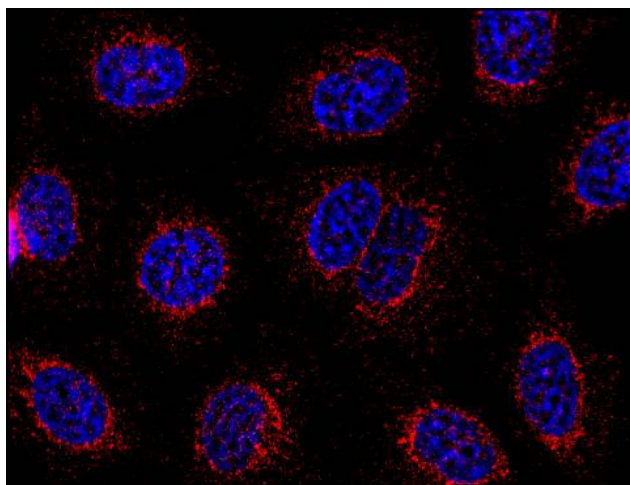
Background: STIM1 (stromal interacting molecule; also known as GOK) acts as a sensor of calcium depletion within the endoplasmic reticulum and transduces the signal to Orai1, the presumptive CRAC channel at the plasma membrane. Following decrease of luminal calcium concentration, STIM1 oligomerizes and induces Orai1 to enable entry of extracellular calcium into the cytoplasm. However, the precise mechanism of STIM1-Orai1 interaction has not been elucidated yet. Many questions also remain to be solved around STIM1 functional distribution. It turns out that STIM1 associates with growing ends of microtubules and is involved in endoplasmic reticulum tubule extension.

Synonyms: Stromal interaction molecule 1

Product images:



Western Blotting analysis (non-reducing conditions) of whole cell lysate of RBL rat basophilic leukemia cell line. Lane 1: immunostaining with anti-STIM1 (CDN3H4) Lane 2: immunostaining with Isotype mouse IgG1 control



Immunofluorescence staining of HeLa human cervix carcinoma cell line using anti-STIM1 (CDN3H4; methanol-aceton fixation; detection by Goat anti-mouse IgG1 Alexa Fluor 598; red). Nuclei were stained with DAPI (blue).