

STIM2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12545a

Specification

STIM2 Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region WB, IHC-P,E <u>O9P246</u> NP_001162588.1, NP_065911.3 Human Rabbit Polyclonal Rabbit IgG 83971 98-127

STIM2 Antibody (N-term) - Additional Information

Gene ID 57620

Other Names Stromal interaction molecule 2, STIM2, KIAA1482

Target/Specificity

This STIM2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 98-127 amino acids from the N-terminal region of human STIM2.

Dilution WB~~1:1000 IHC-P~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

STIM2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

STIM2 Antibody (N-term) - Protein Information

Name STIM2

Synonyms KIAA1482



Function Plays a role in mediating store-operated Ca(2+) entry (SOCE), a Ca(2+) influx following depletion of intracellular Ca(2+) stores. Functions as a highly sensitive Ca(2+) sensor in the endoplasmic reticulum which activates both store-operated and store-independent Ca(2+)-influx. Regulates basal cytosolic and endoplasmic reticulum Ca(2+) concentrations. Upon mild variations of the endoplasmic reticulum Ca(2+) concentration, translocates from the endoplasmic reticulum to the plasma membrane where it probably activates the Ca(2+) release-activated Ca(2+) (CRAC) channels ORAI1, ORAI2 and ORAI3. May inhibit STIM1-mediated Ca(2+) influx.

Cellular Location

Endoplasmic reticulum membrane; Single-pass type I membrane protein. Note=Dynamically translocates from a uniform endoplasmic reticulum distribution to punctual endoplasmic reticulum-plasma membrane junctions in response to decrease in endoplasmic reticulum Ca(2+) concentration

Tissue Location

Expressed in all tissues and tumor cell lines examined.

STIM2 Antibody (N-term) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

STIM2 Antibody (N-term) - Images



STIM2 Antibody (N-term) (Cat. #AP12545a) western blot analysis in uterus tumor cell line lysates (35ug/lane).This demonstrates the STIM2 antibody detected the STIM2 protein (arrow).





STIM2 Antibody (N-term) (Cat. #AP12545a)immunohistochemistry analysis in formalin fixed and paraffin embedded human kidney tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of STIM2 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

STIM2 Antibody (N-term) - Background

This gene is a member of the stromal interaction molecule (STIM) family and likely arose, along with related family member STIM1, from a common ancestral gene. The encoded protein functions to regulate calcium concentrations in the cytosol and endoplasmic reticulum, and is involved in the activation of plasma membrane Orai Ca(2+) entry channels. This gene initiates translation from a non-AUG (UUG) start site. A signal peptide is cleaved from the resulting protein. Multiple transcript variants result from alternative splicing.

STIM2 Antibody (N-term) - References

Darbellay, B., et al. J. Biol. Chem. 285(29):22437-22447(2010) Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) : El Boustany, C., et al. Cell Calcium 47(4):350-359(2010) Zhou, Y., et al. J. Biol. Chem. 284(29):19164-19168(2009) Parvez, S., et al. FASEB J. 22(3):752-761(2008)