

Anti-GOK / STIM1 Antibody (N-Terminus)

Rabbit Anti Human Polyclonal Antibody

Catalog # ALS17897

Product Information

Application	WB, IHC-P, E
Primary Accession	Q13586
Predicted	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	77423
Concentration (mg/ml)	1 mg/ml

Additional Information

Gene ID	6786
Alias Symbol	STIM1
Other Names	STIM1, D11S4896E, Stromal interaction molecule 1, GOK, STIM1L
Target/Specificity	BLAST analysis suggests cross-reactivity with rat, bovine, and mouse based on 100% sequence homology.
Reconstitution & Storage	Immunoaffinity purified
Precautions	Anti-GOK / STIM1 Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	STIM1
Synonyms	GOK {ECO:0000303 PubMed:9377559}
Function	Acts as a Ca(2+) sensor that gates two major inward rectifying Ca(2+) channels at the plasma membrane: Ca(2+) release- activated Ca(2+) (CRAC) channels and arachidonate-regulated Ca(2+)- selective (ARC) channels (PubMed: 15866891 , PubMed: 16005298 , PubMed: 16208375 , PubMed: 16537481 , PubMed: 16733527 , PubMed: 16766533 , PubMed: 16807233 , PubMed: 18854159 , PubMed: 19182790 , PubMed: 19249086 , PubMed: 19622606 , PubMed: 19706554 , PubMed: 22464749 , PubMed: 24069340 , PubMed: 24351972 , PubMed: 24591628 , PubMed: 25326555 , PubMed: 26322679 , PubMed: 28219928 , PubMed: 32415068). Plays a role in mediating store-operated Ca(2+) entry (SOCE), a Ca(2+) influx following depletion of intracellular Ca(2+) stores. Upon Ca(2+) depletion, translocates from the

endoplasmic reticulum to the plasma membrane where it activates CRAC channel pore-forming subunits ORA1, ORA2 and ORAI3 to generate sustained and oscillatory Ca(2+) entry (PubMed:[16208375](#), PubMed:[16537481](#), PubMed:[32415068](#)). Involved in enamel formation (PubMed:[24621671](#)). Plays a role in regulating the type I interferon response by retaining the signaling adapter STING at the endoplasmic reticulum (PubMed:[30643259](#)).

Cellular Location

Cell membrane; Single-pass type I membrane protein. Endoplasmic reticulum membrane; Single-pass type I membrane protein. Cytoplasm, cytoskeleton. Sarcoplasmic reticulum. Note=Translocates from the endoplasmic reticulum to the cell membrane in response to a depletion of intracellular calcium and is detected at punctae corresponding to junctions between the endoplasmic reticulum and the cell membrane (PubMed:16005298, PubMed:16208375, PubMed:18854159, PubMed:19182790, PubMed:19249086). Associated with the microtubule network at the growing distal tip of microtubules (PubMed:19632184). Colocalizes with ORAI1 at the cell membrane (PubMed:27185316). Colocalizes preferentially with CASQ1 at endoplasmic reticulum in response to a depletion of intracellular calcium (PubMed:27185316)

Tissue Location

Ubiquitously expressed in various human primary cells and tumor cell lines.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.