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KD-Validated Anti-Stromal interaction molecule 1 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1285

Product Information

Application	WB, FC, ICC
Primary Accession	Q13586
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	23GB 2415 Spe cies Reactivity
Calculated MW	77423
Gene Name	STIM1
Aliases	STIM1; Stromal Interaction Molecule 1; GOK; D11S4896E; IMD10; STRMK; TAM1; TAM
Immunogen	A synthesized peptide derived from human Stromal interaction molecule 1

Additional Information

Gene ID	6786
Other Names	Stromal interaction molecule 1, STIM1, GOK {ECO:0000303|PubMed:9377559}

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.

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