

GOK / STIM1 Antibody (C-Terminus, clone CDN3H4)
Mouse Monoclonal Antibody
Catalog # ALS11993**Specification**

GOK / STIM1 Antibody (C-Terminus, clone CDN3H4) - Product Information

Application	IHC
Primary Accession	Q13586
Reactivity	Human, Mouse, Rat
Host	Mouse
Clonality	Monoclonal
Calculated MW	77kDa KDa

GOK / STIM1 Antibody (C-Terminus, clone CDN3H4) - Additional Information**Gene ID** 6786**Other Names**

Stromal interaction molecule 1, STIM1, GOK

Target/Specificity

Synthesized peptide (C-terminal cytoplasmic part of STIM1).

Reconstitution & Storage

Store at 4-8 degrees C. Do not freeze.

Precautions

GOK / STIM1 Antibody (C-Terminus, clone CDN3H4) is for research use only and not for use in diagnostic or therapeutic procedures.

GOK / STIM1 Antibody (C-Terminus, clone CDN3H4) - 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)

target="_blank">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 ORA3 to generate sustained and oscillatory Ca^{2+} entry (PubMed:16208375, PubMed:16537481, PubMed:32415068). Involved in enamel formation (PubMed:24621671).

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 ORA1 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.

Volume

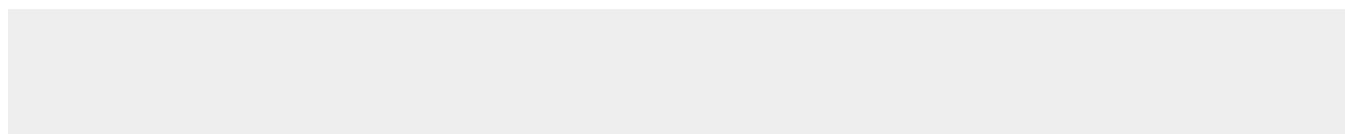
50 μl

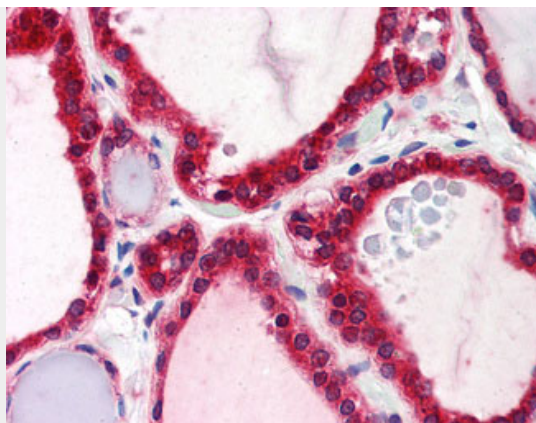
GOK / STIM1 Antibody (C-Terminus, clone CDN3H4) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

GOK / STIM1 Antibody (C-Terminus, clone CDN3H4) - Images





Anti-STIM1 antibody IHC of human thyroid.

GOK / STIM1 Antibody (C-Terminus, clone CDN3H4) - Background

Plays a role in mediating store-operated Ca^{2+} entry (SOCE), a Ca^{2+} influx following depletion of intracellular Ca^{2+} stores. Acts as Ca^{2+} sensor in the endoplasmic reticulum via its EF-hand domain. Upon Ca^{2+} depletion, translocates from the endoplasmic reticulum to the plasma membrane where it activates the Ca^{2+} release-activated Ca^{2+} (CRAC) channel subunit, TMEM142A/Orai1.

GOK / STIM1 Antibody (C-Terminus, clone CDN3H4) - References

Parker N.J., et al. Genomics 37:253-256(1996).
Ota T., et al. Nat. Genet. 36:40-45(2004).
Taylor T.D., et al. Nature 440:497-500(2006).
Mural R.J., et al. Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.
Sabbioni S., et al. Cancer Res. 57:4493-4497(1997).