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Anti-STIM1 (SHEEP) Antibody
STIM1 Antibody
Catalog # ASR5900

Specification

Anti-STIM1 (SHEEP) Antibody - Product Information

Host	**Sheep**
Conjugate	**Unconjugated**
Target Species	**Human**
Reactivity	**Human**
Clonality	**Polyclonal**
Application	**WB, IHC, E, I, LCI**
Application Note	**Anti-Stim I antibody is tested for ELISA and immunohistochemistry and suitable for Western Blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~77kDa corresponding to the appropriate cell lysate or extract.**
Physical State	**Liquid (sterile filtered)**
Buffer	**0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2**
Immunogen	**Stim 1 affinity purified antibody was prepared from whole sheep serum produced by repeated immunizations with a synthetic peptide near the N-terminus of human Stim 1.**
Stabilizer	**50% (v/v) Glycerol with 1 mg/ml Bovine Serum Albumin (BSA)**

Anti-STIM1 (SHEEP) Antibody - Additional Information

Gene ID 6786

Other Names
6786

Purity
Anti-Stim I was affinity purified from monospecific antiserum by immunoaffinity chromatography. A BLAST analysis was used to suggest cross-reactivity with rat, human, and mouse based on 100% sequence homology. Cross-reactivity with Stim I from other sources has not been determined.

Storage Condition
Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note
This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-STIM1 (SHEEP) Antibody - 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).

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.

Anti-STIM1 (SHEEP) Antibody - Protocols

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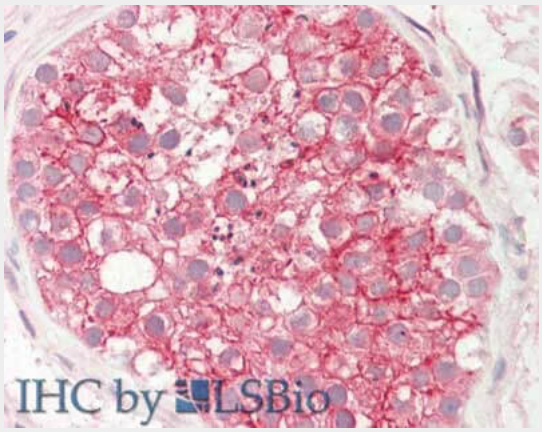
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-STIM1 (SHEEP) Antibody - Images



Immunohistochemistry of Sheep anti-GOK / STIM1 antibody. Tissue: Testis. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: GOK / STIM1 antibody at 5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase sheep secondary antibody at 1:10,000 for 45 min at RT. Staining: GOK / STIM1 as precipitated red signal with hematoxylin purple nuclear counterstain.

Anti-STIM1 (SHEEP) Antibody - Background

Stim I antibody helps regulate calcium influx after the depletion of intracellular calcium stores. It functions as a calcium sensor in the endoplasmic reticulum via its EF-hand domain. After depletion of Ca+2, it is translocated from the endoplasmic reticulum to the plasma membrane so the calcium release-activated channel subunit is activated. Anti-Stim I antibody is ideal for investigators interested in Metabolism and Signal Transduction research.