

Product datasheet

Recombinant Human Stromal interaction molecule 1 protein ab78681

[1 Image](#)

Description

| | |
|--------------------------|---|
| Product name | Recombinant Human Stromal interaction molecule 1 protein |
| Purity | > 90 % SDS-PAGE. ab78681 is purified using conventional chromatography techniques. |
| Expression system | Escherichia coli |
| Protein length | Full length protein |
| Animal free | No |
| Nature | Recombinant |
| Species | Human |
| Sequence | <p><u>MADQLTEEQIAEFKEAFSLF DKDGDGTITT</u> <u>KELGTVMRSL GQNPTEAELQ DMINEVDADG</u> <u>NGTIDFPEFL TMMARKMKDT DSEEEIREAF</u> <u>RVFDKDGNGY ISAAELRHVM TNLGEKLTDE</u> <u>EVDEMIREAD IDGDGQVNYE EFVQMMTAKG</u> <u>SMLSHSHSEK ATGTSSGANS EESTAAEFGR</u> <u>IDKPLCHSED EKLSFEAVRN IHKLMDDAN</u> <u>GDVDVEESDE FLREDLNYHD PTVKHSTFHG</u> <u>EDKLISVEDL WKAWKSSEVY NWTVDDEVVQW</u> <u>LITYVELPQY EETFRKLQLS GHAMPRLAVT NTTMTGTVLK</u> <u>MTDRSHRQKL QLKALDTVLF GPPLLTRHNH LKD</u> underlined sequence is the CaM tag.</p> |
| Amino acids | 23 to 213 |

Specifications

Our **Abpromise guarantee** covers the use of **ab78681** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications SDS-PAGE

Form Liquid

Preparation and Storage

Stability and Storage

Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

pH: 7.50

Constituent: 0.242% Tris

General Info

Function

Plays a role in mediating 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.

Tissue specificity

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

Involvement in disease

Defects in STIM1 are the cause of immune dysfunction with T-cell inactivation due to calcium entry defect type 2 (IDTICED2) [MIM:612783]. IDTICED2 is an immune disorder characterized by recurrent infections, impaired T-cell activation and proliferative response, decreased T-cell production of cytokines, lymphadenopathy, and normal lymphocytes counts and serum immunoglobulin levels. Additional features include thrombocytopenia, autoimmune hemolytic anemia, non-progressive myopathy, partial iris hypoplasia, hepatosplenomegaly and defective enamel dentition.

Sequence similarities

Contains 1 EF-hand domain.

Contains 1 SAM (sterile alpha motif) domain.

Domain

The microtubule tip localization signal (MtLS) motif; mediates interaction with MAPRE1 and targeting to the growing microtubule plus ends.

Post-translational modifications

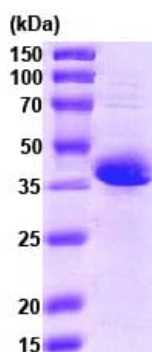
Glycosylation is required for cell surface expression.

Phosphorylated predominantly on Ser residues.

Cellular localization

Cell membrane. Endoplasmic reticulum membrane. Cytoplasm > cytoskeleton. Translocates from the endoplasmic reticulum to the cell membrane in response to a depletion of intracellular calcium. Associated with the microtubule network at the growing distal tip of microtubules.

Images



15% SDS-PAGE showing **ab68681** at approximately 38kDa (3µg).

SDS-PAGE - Recombinant Human Stromal
interaction molecule 1 protein (ab78681)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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