

# Recombinant human STIM1 protein

Catalog Number: STI0801

## PRODUCT INFORMATION

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**Expression system**

E.coli

**Domain**

23-213aa

**UniProt No.**

Q13586

**NCBI Accession No.**

NP\_003147

**Alternative Names**

Stromal interaction molecule 1, GOK, D11S4896E, Stromal interaction molecule 1, STIM1, Stromal interaction molecule 1 D11S4896E, SIM, STIM 1, Stim1 stromal interaction molecule 1.

## PRODUCT SPECIFICATION

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**Molecular Weight**

38 kDa (343aa) confirmed by MALDI-TOF

**Concentration**

1mg/ml (determined by Bradford assay)

**Formulation**

Liquid in. 20mM Tris-HCl buffer (pH 7.5)

**Purity**

&gt; 90% by SDS-PAGE

**Tag**

Calmodulin Tag

**Application**

SDS-PAGE

**Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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**Description**

Stromal interaction molecule 1 (STIM1) is a transmembrane protein that is essential for store-operated Ca (2+) entry, a process of extracellular Ca (2+) influx in response to the depletion of Ca (2+) stores in the endoplasmic reticulum (ER). STIM1 localizes predominantly to the ER; upon Ca (2+) release from the ER, STIM1 translocates to the ER-plasma membrane junctions and activates Ca (2+) channels. Recombinant Calmodulin tagged STIM1 was expressed in E. coli and purified by using conventional chromatography techniques.

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## Amino acid Sequence

MADQLTEEQI AEFKEAFSLF DKDGGDTITT KELGTVMRSL GQNPTAELQ DMINEVDADG NGTIDFPEFL TMMARKMKDT  
DSEEEIREAF RVFDKDGNGY ISAAELRHVM TNLGEKLTDE EVDEMIREAD IDGGGQVNYE EFVQMMTAKG SMLSHSHSEK  
ATGTSSGANS EESTAAEFGR IDKPLCHSED EKLSFEAVRN IHKLMDDAN GDVDVEESDE FLREDLNYHD PTVKHSTFHG  
EDKLISVEDL WKAWKSSEVY NWTVDEVVQW LITYVELPQY EETFRKLQLS GHAMPRLAVT NTTMTGTVLK MTD RSHRQKL  
QLKALDTVLF GPPLLTRHNNH LKD

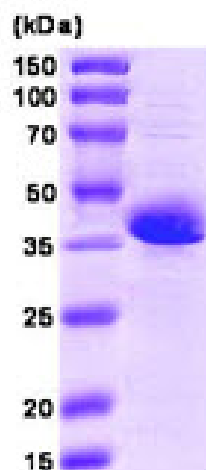
## General References

Varnai P., et al. (2007) J. Biol. Chem . 282(40):29678-90.

Grigoriev I., et al. (2008) Curr Biol. 18(3):177-82.

## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

15% SDS-PAGE (3ug)