

Recombinant human STIM1 protein

Catalog Number: STI0801

PRODUCT INFORMATION

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

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

> 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

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

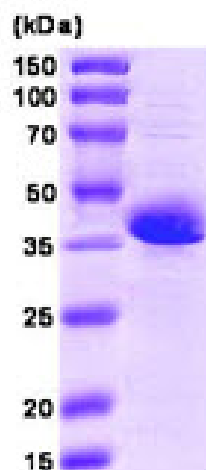
General References

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)