

**STIM1, 23-213aa, Human, CaM tagged, Recombinant, E.coli**

**Cat.NO.: TP04059**

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3th Edition

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

**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 STIM was expressed in E.coli and purified by using conventional chromatography techniques.

**Form:**Liquid in 20mM Tris pH 7.5

**Molecular Weight:**38 kDa (343 aa), confirmed by MALDI-TOF.

**Sequences:**

MADQLTEEQIAEFKEAFSLFDKDKDGGTITTKELGTVMRSLGQNPTEAELQDMINEVDADGNGTIDFPEFLTMMARK  
MKD TDSEEEI REAFRVFDKDGNGYISAAELRHVMTNLGEKLTDEEVDEMIREADIDGGQVNYEEFVQMMTAKGS  
MLSHSHSEKATGTSSGANSEESTAAEF CRIDKPLCHSEDEKLSFEAVRNIHKLMDDDANGDVDVEESDEFLREDLN  
YHDPTVKHSTFHGEDKLISVEDLWKAWKSSEVYNWTVDEVVQWLITYVELPQYEETFRKLQLSGHAMPRLAVTNT  
TMTGTVLKMTDRSHRQKLQKALD TVLFGPPLLTRHNHLKD

**Purity:**> 95% by HPLC

**Concentration:**1 mg/ml (determined by Bradford assay)

**Endotoxin Level:**<1.0 EU per 1 ug of protein (determined by LAL method)

**Storage:**Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.