32-4980: Recombinant Human Stromal Interaction Molecule 1

Alternative Name : Stromal interaction molecule 1,GOK,D11S4896E,STIM-1,STIM1.

Description

Source : Escherichia Coli. Recombinant STIM1 produced in E.Coli is a single, non-glycosylated polypeptide chain containing 343 amino acids and having a molecular mass of 38 kDa. STIM1 is fused to Calmodulin and purified by conventional chromatography techniques. STIM1 is a type-1 transmembrane protein that is necessary 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. STIM1 is an adhesion molecule involved in early hematopoiesis by mediating attachment to stromal cells. STIM1 controls the survival and/or proliferation of b-cell precursors. STIM1 gene is one of several genes located in the imprinted gene domain of 11p15.5, a significant tumor-suppressor gene region. Alterations in this region have been associated with the Beckwith-Wiedemann syndrome, Wilms tumor, rhabdomyosarcoma, adrenocrotical carcinoma, and lung, ovarian, and breast cancer. STIM1 is involved in malignancies as well as early hematopoiesis, by mediating attachment to stromal cells. STIM1 is oriented in a head-to-tail configuration with the ribonucleotide reductase 1 gene (RRM1), with the 3' end of this gene situated 1.6 kb from the 5' end of the RRM1 gene.

Product Info

Amount :	25 µg
Purification :	Greater than 90.0% as determined by(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.
Content :	The STIM1 protein solution (1mg/ml) contains 20mM Tris pH-7.5.
Storage condition :	Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.
Amino Acid :	MADQLTEEQI AEFKEAFSLF DKDGDGTITT KELGTVMRSL GQNPTEAELQ DMINEVDADG NGTIDFPEFL TMMARKMKDT DSEEEIREAF RVFDKDGNGY ISAAELRHVM TNLGEKLTDE EVDEMIREAD IDGDGQVNYE EFVQMMTAKG SMLSHSHSEK ATGTSSGANS EESTAAEFCR IDKPLCHSED EKLSFEAVRN IHKLMDDDAN GDVDVEESDE FLREDLNYHD PTVKHSTFHG EDKLISVEDL WKAWKSSEVY NWTVDEVVQW LITYVELPQY EETFRKLQLS GHAMPRLAVT NTTMTGTVLK MTDRSHRQKL QLKALDTVLF GPPLLTRHNH LKD.