

Datasheet for ABIN7317559 **STIM1 Protein (His tag)**



[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	STIM1
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This STIM1 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human STIM1/GOK Protein (His Tag)
Sequence:	Met 1-Asp 213
Characteristics:	A DNA sequence encoding the human STIM1 (NP_003147.2) extracellular domain (Met 1-Asp 213) was expressed, with a polyhistidine tag at the C-terminus.
Purity:	> 97 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.

Target Details

Target:	STIM1
Alternative Name:	STIM1/GOK (STIM1 Products)
Background:	Background: Stromal interaction molecule 1, also known as STIM1 and GOK, is a cell membrane, a single-pass type I membrane protein and a endoplasmic reticulum membrane protein. STIM1 / GOK is ubiquitously expressed in various human primary cells and tumor cell

Target Details

lines. It contains one EF-hand domain and one SAM (sterile alpha motif) domain. STIM1 / GOK plays a role in mediating Ca²⁺ influx following depletion of intracellular Ca²⁺ stores. It acts as Ca²⁺ sensor in the endoplasmic reticulum via its EF-hand domain. Upon Ca²⁺ depletion, STIM1 / GOK translocates from the endoplasmic reticulum to the plasma membrane where it activates the Ca²⁺ release-activated Ca²⁺ (CRAC) channel subunit, TMEM142A / ORAI1. Transfection of STIM1 / GOK into cells derived from a rhabdoid tumor and from a rhabdomyosarcoma that do not express detectable levels of STIM1 can induce cell death, suggesting a possible role in the control of rhabdomyosarcomas and rhabdoid tumors. Defects in STIM1 are the cause of immune dysfunction with T-cell inactivation due to calcium entry defect type 2 (IDTICED2) which 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.

Synonym: D11S4896E;GOK;IMD10;STRMK;TAM;TAM1

Molecular Weight: 23.3 kDa

NCBI Accession: [NP_003147](#)

Pathways: [TCR Signaling](#), [BCR Signaling](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Please refer to the printed manual for detailed information.

Buffer: Lyophilized from sterile PBS, pH 7.4

Storage: 4 °C,-20 °C,-80 °C

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.