

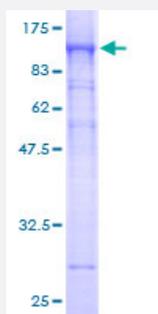
Full-Length

# STIM1 (Human) Recombinant Protein (P01)

Catalog # H00006786-P01

Size 25 ug, 10 ug

## Applications



## Specification

### Product Description

Human STIM1 full-length ORF ( AAH21300, 24 a.a. - 685 a.a.) recombinant protein with GST-tag at N-terminal.

### Sequence

SHSHSEKATGTSSGANSEESTAAEF CRIDKPLCHSEDEKLSFEAVRNIHKLMDDDANGDVDVEE  
 SDEFLREDLNYHDPTVKHSTFHGEDKLISVEDLWKAWKSSEVYNWTVDEVVQWLITYVELPQYE  
 ETFRKLQLSGHAMPRLAVTNTTMTGAVLKMTDRSHRQKLQKALD TVLFGPPLLTRHNHLKDFML  
 VVSIVIGVGGCWFA YIQNRYSKEHMKMMKDLEGLHRAEQSLHDLQERLHKAQEEHRTVEVEKV  
 HLEKKLRDEINLAKQEAQRLKELREGTENERSRQKYAE EEELEQVREALRKAKEKELESHSSWYAP  
 EALQKWLQLTHEVEVQYNIKKQNAEKQLLVAKEGAEKIKKKRNTLFGTFHVAHSSSLDDVDHKIL  
 TAKQALSEVTAALRERLHRWQQIEILCGFQIVNNPGIHSLSVAALNIDPSWMGSTRPNPAHFIMTDDV  
 DDMDEEIVSPLSMQSPSLQSSVRQRLTEPQHGLGSQRDLTHSDSESSLHMSDRQRVAPKPPQM  
 SRAADEALNAMTSNGSHRLIEGVHPGSLVEKLPDSPALAKKALLALNHGLDKAHSLMELSPSAP  
 PGGSPHLDSRSHPSSPDPDTPSPVGD SRALQASRNTRIPHLAGKKAVAEEDNGSIGEETDSS  
 PGRKKFPLKIFKKPLKK

### Host

Wheat Germ (in vitro)

### Theoretical MW (kDa)

98.56

### Preparation Method

[in vitro wheat germ expression system](#)

### Purification

Glutathione Sepharose 4 Fast Flow

### Quality Control Testing

12.5% SDS-PAGE Stained with Coomassie Blue.

<b>Storage Buffer</b>	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
<b>Storage Instruction</b>	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
<b>Note</b>	Best use within three months from the date of receipt of this protein.

## Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

## Gene Info — STIM1

<b>Entrez GeneID</b>	<a href="#">6786</a>
<b>GeneBank Accession#</b>	<a href="#">BC021300</a>
<b>Protein Accession#</b>	<a href="#">AAH21300</a>
<b>Gene Name</b>	STIM1
<b>Gene Alias</b>	D11S4896E, GOK
<b>Gene Description</b>	stromal interaction molecule 1
<b>Omim ID</b>	<a href="#">605921</a>
<b>Gene Ontology</b>	<a href="#">Hyperlink</a>
<b>Gene Summary</b>	<p>This gene encodes a type 1 transmembrane protein that mediates Ca<sup>2+</sup> influx after depletion of intracellular Ca<sup>2+</sup> stores by gating of store-operated Ca<sup>2+</sup> influx channels (SOCs). It is one of several genes located in the imprinted gene domain of 11p15.5, an important tumor-suppressor gene region. Alterations in this region have been associated with the Beckwith-Wiedemann syndrome, Wilms tumor, rhabdomyosarcoma, adrenocortical carcinoma, and lung, ovarian, and breast cancer. This gene may play a role in malignancies and disease that involve this region, as well as early hematopoiesis, by mediating attachment to stromal cells. This gene 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</p>
<b>Other Designations</b>	-

## Publication Reference

- [S-glutathionylation activates STIM1 and alters mitochondrial homeostasis.](#)

Hawkins BJ, Irrinki KM, Mallilankaraman K, Lien YC, Wang Y, Bhanumathy CD, Subbiah R, Ritchie MF, Soboloff J, Baba Y, Kurosaki T, Joseph SK, Gill DL, Madesh M.

The Journal of Cell Biology 2010 Aug; 190(3):391.

Application: Func, Calcium