



## Rabbit Anti-STIM1 antibody

SL8526R

<b>Product Name:</b>	STIM1
<b>Chinese Name:</b>	基质交感分子1抗体
<b>Alias:</b>	GOK; SIM; STIM 1; STIM1; STIM-1; Stim1 stromal interaction molecule 1; STIM1_HUMAN; STIM1L; Stromal interaction molecule 1.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Rabbit,
<b>Applications:</b>	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:50-200 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	75kDa
<b>Cellular localization:</b>	cytoplasmicThe cell membrane
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human STIM1:85-180/685<Extracellular>
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	Plays a role in mediating Ca(2+) influx following depletion of intracellular Ca(2+) stores. Acts as Ca(2+) sensor in the endoplasmic reticulum via its EF-hand domain. Upon Ca(2+) depletion, translocates from the endoplasmic reticulum to the plasma membrane where it activates the Ca(2+) release-activated Ca(2+) (CRAC) channel subunit, TMEM142A/ORAI1.

**Function:**

Plays a role in mediating store-operated Ca(2+) entry (SOCE), a Ca(2+) influx following depletion of intracellular Ca(2+) stores. Acts as Ca(2+) sensor in the endoplasmic reticulum via its EF-hand domain. Upon Ca(2+) depletion, translocates from the endoplasmic reticulum to the plasma membrane where it activates the Ca(2+) release-activated Ca(2+) (CRAC) channel subunit, TMEM142A/ORAI1.

**Subunit:**

Forms homooligomers and heterooligomers with STIM2. Interacts with ORAI1. Interacts with MAPRE1; probably required for targeting to the growing microtubule plus ends. Interacts with EFCAB4B/CRACR2A; the interaction is direct and takes place in absence of Ca(2+). Forms a complex with EFCAB4B/CRACR2A and ORAI1 at low concentration of Ca(2+), the complex dissociates at elevated Ca(2+) concentrations. Interacts with TMEM66/SARAF, promoting a slow inactivation of STIM1-dependent SOCE activity, possibly by facilitating the deoligomerization of STIM1.

**Subcellular Location:**

Cell membrane. Endoplasmic reticulum membrane. Cytoplasm > cytoskeleton. Translocates from the endoplasmic reticulum to the cell membrane in response to a depletion of intracellular calcium. Associated with the microtubule network at the growing distal tip of microtubules.

**Tissue Specificity:**

Ubiquitously expressed in various human primary cells and tumor cell lines.

**Post-translational modifications:**

Glycosylation is required for cell surface expression.  
Phosphorylated predominantly on Ser residues.

**DISEASE:**

Defects in STIM1 are the cause of immune dysfunction with T-cell inactivation due to calcium entry defect type 2 (IDTICED2) [MIM:612783]. IDTICED2 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. Additional features include thrombocytopenia, autoimmune hemolytic anemia, non-progressive myopathy, partial iris hypoplasia, hepatosplenomegaly and defective enamel dentition.

**Similarity:**

Contains 1 EF-hand domain.  
Contains 1 SAM (sterile alpha motif) domain.

**SWISS:**

Q13586

**Gene ID:**  
6786

**Database links:**

[Entrez Gene: 6786](#) Human

[Entrez Gene: 20866](#) Mouse

[Entrez Gene: 361618](#) Rat

[Omim: 605921](#) Human

[SwissProt: Q13586](#) Human

[SwissProt: P70302](#) Mouse

[SwissProt: P84903](#) Rat

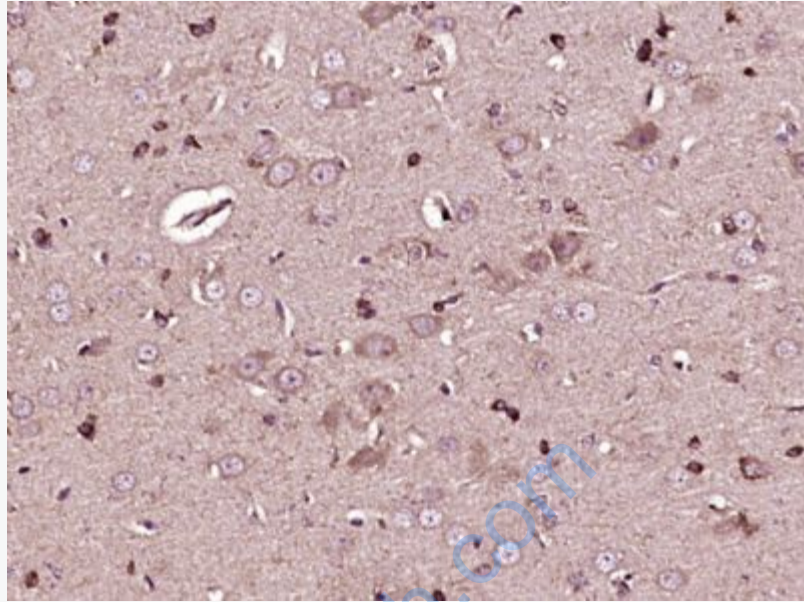
[Unigene: 501735](#) Human

[Unigene: 645](#) Mouse

[Unigene: 106771](#) Rat

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



**Picture:**

Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (STIM1) Polyclonal Antibody, Unconjugated (SL8526R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.