



Rabbit Anti-TRPM7 antibody

SL9044R

Product Name:	TRPM7
Chinese Name:	瞬时受体电位离子Channel protein7抗体(M亚家族)
Alias:	CHAK 1; CHAK; CHAK1; Channel kinase 1; Channel-kinase 1; FLJ20117; FLJ25718; homolog of mouse transient receptor potential-phospholipase C-interacting kinase; Long transient receptor potential channel 7; LTRPC 7; LTRPC ion channel family member 7; LTrpC-7; LTRPC7; transient receptor potential cation channel subfamily M member 7; TRP PLIK; TRP-PLIK; TRPM 7; TRPM7; TRPM7 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Rabbit,
Applications:	ELISA=1:500-1000IHC-F=1:400-800ICC=1:100-500IF=1:50-200 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	180, 205kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human TRPM7:801-900/1865<Extracellular>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	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.
PubMed:	PubMed
Product Detail:	The protein encoded by this gene is both an ion channel and a serine/threonine protein kinase. The kinase activity is essential for the ion channel function, which serves to

increase intracellular calcium levels and to help regulate magnesium ion homeostasis. Defects in this gene are a cause of amyotrophic lateral sclerosis-parkinsonism/dementia complex of Guam.[provided by RefSeq, May 2010].

Function:

Essential ion channel and serine/threonine-protein kinase. Divalent cation channel permeable to calcium and magnesium. Has a central role in magnesium ion homeostasis and in the regulation of anoxic neuronal cell death. The kinase activity is essential for the channel function. May be involved in a fundamental process that adjusts plasma membrane divalent cation fluxes according to the metabolic state of the cell. Phosphorylates annexin A1 (ANXA1).

Subunit:

Homodimer. Interacts with PLCB1. Forms heterodimers with TRPM6.

Subcellular Location:

Membrane; Multi-pass membrane protein

Post-translational modifications:

Autophosphorylated (By similarity).

DISEASE:

Defects in TRPM7 are a cause of susceptibility to amyotrophic lateral sclerosis-parkinsonism/dementia complex type 1 (ALS-PDC1) [MIM:105500]; also called amyotrophic lateral sclerosis-parkinsonism/dementia complex of Guam or Guam disease. Amyotrophic lateral sclerosis-parkinsonism/dementia complex type 1 is a neurodegenerative disorder characterized by chronic, progressive and uniformly fatal amyotrophic lateral sclerosis and parkinsonism-dementia. Both diseases are known to occur in the same kindred, the same sibship and even the same individual.

Similarity:

In the C-terminal section; belongs to the protein kinase superfamily. Alpha-type protein kinase family. ALPK subfamily.

In the N-terminal section; belongs to the transient receptor (TC 1.A.4) family. LTrpC subfamily. TRPM7 sub-subfamily.

Contains 1 alpha-type protein kinase domain.

SWISS:

Q96QT4

Gene ID:

54822

Database links:

[Entrez Gene: 54822](#) Human

[Entrez Gene: 58800](#) Mouse

[Entrez Gene: 679906](#) Rat

[Omid: 605692](#) Human

[SwissProt: Q96QT4](#) Human

[SwissProt: Q923J1](#) Mouse

[SwissProt: Q925B3](#) Rat

[Unigene: 512894](#) Human

[Unigene: 244705](#) Mouse

[Unigene: 86991](#) Rat

Important Note:

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