

Rabbit Anti-Tropomodulin 4 antibody

SL17157R

Product Name:	Tropomodulin 4
Chinese Name:	原肌球蛋白调节蛋白4抗体
Alias:	Actin capping protein; SK TMOD; Sk-Tmod; Skeletal muscle tropomodulin; SKTMOD; TMOD 4; TMOD4; Tropomodulin 4 (muscle); Tropomodulin-4.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Horse, Rabbit, Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100- 500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	39kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Tropomodulin 4:21-120/345
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:	Originally isolated from human erythrocytes, the tropomodulin (TMOD) family of proteins cap the pointed end of actin filaments (1,2). A component of the membrane skeleton, TMOD binds to the amino terminus of tropomyosin, which coats the surface of actin, and thus blocks the elongation and depolymerization of actin filaments (3,4). Four TMOD isoforms, TMOD1 - TMOD4, have been characterized in humans (2). TMOD expression is isoform-specific; TMOD3 is expressed ubiquitously, whereas

TMOD2 and TMOD4 are expressed in neuronal tissue and muscle, respectively (5). TMOD4, which has a similar organization to TMOD2, is intergenically spliced by the putative transformation suppressor gene product YL-1 (1). The human TMOD4 gene maps to the telomeric end of chromosome 1q12, and encodes a 351 amino acid protein (1,5). The expression and chromosomal location of the TMOD4 gene make it a candidate for limb girdle musclular dystrophy 1B (5).

Function:

Tropomodulin 4 prevents the elongation and depolymerization of the actin filaments at the pointed end, and intervenes in the formation of the short actin protofilament, which determines the structure of the membrane skeleton.

Subunit: Binds to the N-terminus of tropomyosin and to actin.

Subcellular Location: Cytoplasm, cytoskeleton.

Tissue Specificity: Highly expressed in skeletal muscle.

Similarity: Belongs to the tropomodulin family.

SWISS: Q9NZQ9

Gene ID: 29765

Database links:

Entrez Gene: 505645 Cow

Entrez Gene: 29765 Human

<u>Omim: 605834</u> Human

SwissProt: Q0VC48 Cow

SwissProt: Q9NZQ9 Human

Unigene: 709681 Human

Important Note:

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

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