

Rabbit Anti-Tropomodulin 3 antibody

SL17156R

Product Name:	Tropomodulin 3
Chinese Name:	原肌球蛋白调节蛋白3抗体
Alias:	OTTHUMP00000162615; Tmod3; TMOD3_HUMAN; Tropomodulin 3 (ubiquitous); Tropomodulin 3 ubiquitous; Tropomodulin-3; U Tmod; U-Tmod; Ubiquitous tropomodulin; UTmod.
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:	40kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Tropomodulin 3:21-120/352
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:	<u>PubMed</u>
Product Detail:	?Originally isolated from human erythrocytes, the tropomodulin (TMOD) family of proteins cap the pointed end of Actin filaments. A component of the membrane skeleton, tropomodulin binds to the amino-terminus of Tropomyosin, which coats the surface of Actin, and thus blocks the elongation and depolymerization of Actin filaments. Four tropomodulin isoforms, tropomodulin 1-4, have been characterized in humans.

Tropomodulin expression is isoform-specific; tropomodulin 3 is expressed ubiquitously, whereas tropomodulin 2 and tropomodulin 4 are expressed in neuronal tissue and muscle, respectively. Ubiquitous expression of seven tropomodulin 3 transcripts, ranging in size between 1 and 9.5 kb, have been identified by Northern Blot analysis on human tissues. The human TMOD3 gene maps to chromosome 15q21.2, within the same region as the gene for amyotrophic lateral sclerosis 5 (ALS5), and encodes a 352 amino acid protein. Tmod3, the mouse homolog to human TMOD3, is present as early as day 7 in embryonic development and is expressed throughout development.

Function:

Blocks the elongation and depolymerization of the actin filaments at the pointed end. The Tmod/TM complex contributes to the formation of the short actin protofilament, which in turn defines the geometry of the membrane skeleton.

Subunit:

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

Subcellular Location:

Cytoplasm > cytoskeleton.

Tissue Specificity:

Ubiquitous.

Similarity:

Belongs to the tropomodulin family.

SWISS:

O9NYL9

Gene ID:

29766

Database links:

Entrez Gene: 29766 Human

Entrez Gene: 50875 Mouse

Entrez Gene: 397556 Pig

Entrez Gene: 300838 Rat

Omim: 605112 Human

SwissProt: Q9NYL9 Human

SwissProt: Q9JHJ0 Mouse

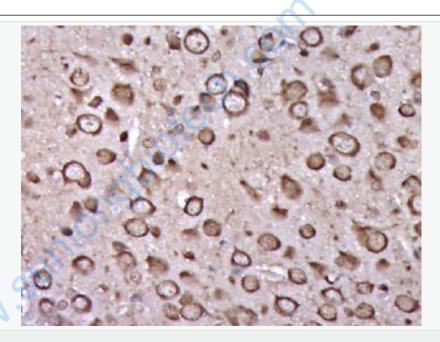
<u>Unigene: 4998</u> Human

<u>Unigene: 38445</u> Mouse

<u>Unigene: 146101</u> 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 (Tropomodulin 3) Polyclonal Antibody, Unconjugated (SL17156R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.