

TMOD1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP16327c

Product Information

Application	WB, E
Primary Accession	P28289
Other Accession	A0JNCO , NP_001159588.1 , NP_003266.1
Reactivity	Human
Predicted	Bovine, Mouse, Rat, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB35766
Calculated MW	40569
Antigen Region	170-198

Additional Information

Gene ID	7111
Other Names	Tropomodulin-1, Erythrocyte tropomodulin, E-Tmod, TMOD1, D9S57E, TMOD
Target/Specificity	This TMOD1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 170-198 amino acids from the Central region of human TMOD1.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	TMOD1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TMOD1
Synonyms	D9S57E, TMOD
Function	Blocks the elongation and depolymerization of the actin filaments at the

pointed end (PubMed:[38168645](#)). The Tmod/TM complex contributes to the formation of the short actin protofilament, which in turn defines the geometry of the membrane skeleton. May play an important role in regulating the organization of actin filaments by preferentially binding to a specific tropomyosin isoform at its N- terminus.

Cellular Location

Cytoplasm, cytoskeleton. Note=In myofibrils with sarcomeric structure, localizes to the pointed end of actin thin filaments (PubMed:25250574, PubMed:38168645).

Tissue Location

Highly expressed in the erythrocyte, heart and skeletal muscle

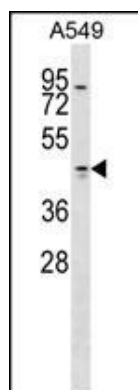
Background

TMOD1 is a member of the tropomodulin family. The encoded protein is an actin-capping protein that regulates tropomyosin by binding to its N-terminus, inhibiting depolymerization and elongation of the pointed end of actin filaments and thereby influencing the structure of the erythrocyte membrane skeleton. Multiple transcript variants encoding the same protein have been found for this gene.

References

Olsen, J.V., et al. Cell 127(3):635-648(2006)
Kong, K.Y., et al. J. Biol. Chem. 281(14):9589-9599(2006)
Vera, C., et al. Arch. Biochem. Biophys. 444(2):130-138(2005)
Pawlak, G., et al. Int. J. Cancer 110(3):368-373(2004)
Rho, S.B., et al. FEBS Lett. 557 (1-3), 57-63 (2004) :

Images



TMOD1 Antibody (Center) (Cat. #AP16327c) western blot analysis in A549 cell line lysates (35ug/lane). This demonstrates the TMOD1 antibody detected the TMOD1 protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.