

#60763 Store at -20C

TMOD1 Antibody



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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB	H	Endogenous	45	Rabbit	#P28289	7111

Product Usage Information	Application Western Blotting	Dilution 1:1000
Storage	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.	
Specificity / Sensitivity	TMOD1 Antibody recognizes endogenous levels of total TMOD1 protein. The antibody is not predicted to cross-react with other TMOD protein family members (TMOD2-4).	
Source / Purification	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro353 of human TMOD1 protein. Antibodies are purified by protein A and peptide affinity chromatography.	
Background	Tropomodulin-1 (TMOD1) belongs to a conserved family of cytoskeletal proteins (TMOD1-4) that play an important role in modulating actin cytoskeleton dynamics. TMOD proteins function as actin capping proteins, which stabilize actin filaments by inhibiting both elongation and depolymerization (1). While many proteins have been identified that cap the rapidly growing barbed end of actin filaments, TMODs are the only proteins thus far identified that cap the slowly growing pointed end (2). A research study in triple-negative breast cancer cells identified TMOD1 as a target of NF-κB signaling, and showed that increased TMOD1 expression was associated with enhanced tumor growth in a mouse xenograft model (3). Molecular expression of <i>TMOD1</i> was also identified as part of a unique gene expression signature that could discriminate ALK-negative anaplastic large-cell lymphoma from other malignancy subtypes (4).	
Background References	<ol style="list-style-type: none"> 1. Fischer, R.S. and Fowler, V.M. (2003) <i>Trends Cell Biol</i> 13, 593-601. 2. Rao, J.N. et al. (2014) <i>Science</i> 345, 463-7. 3. Ito-Kureha, T. et al. (2015) <i>Cancer Res</i> 75, 62-72. 4. Agnelli, L. et al. (2012) <i>Blood</i> 120, 1274-81. 	

Species Reactivity	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
Western Blot Buffer	IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.
Applications Key	WB: Western Blotting
Cross-Reactivity Key	H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm: D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Sc: S. cerevisiae Ce: C. elegans Hr: horse GP: Guinea Pig Rab: rabbit All: all species expected
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