

TMOD1 (E7E3A) XP[®] Rabbit mAb

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP, IHC-P	H M R Mk	Endogenous	45	Rabbit IgG	#P28289	7111

Product Usage Information**Application**

Western Blotting
Immunoprecipitation
Immunohistochemistry (Paraffin)

Dilution

1:1000
1:50
1:2560

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

TMOD1 (E7E3A) XP[®] Rabbit mAb recognizes endogenous levels of total TMOD1 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Val106 of human TMOD1 protein.

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 *TMOD1* 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

1. Fischer, R.S. and Fowler, V.M. (2003) *Trends Cell Biol* 13, 593-601.
2. Rao, J.N. et al. (2014) *Science* 345, 463-7.
3. Ito-Kureha, T. et al. (2015) *Cancer Res* 75, 62-72.
4. Agnelli, L. et al. (2012) *Blood* 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

W: Western Blotting **IP:** Immunoprecipitation **IHC-P:** Immunohistochemistry (Paraffin)

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat **Mk:** Monkey

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