Rabbit TMOD2 Polyclonal Antibody | anti-TMOD2 antibody

Anti-TMOD2 Antibody Picoband

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA127762	**Rabbit**	**Human, Mouse, Rat**	**ELISA, Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Western Blot**

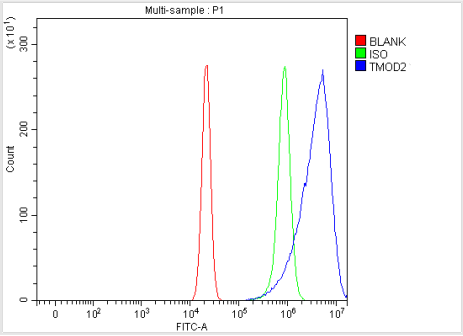
PRODUCT SYNONYMS

TMOD2; Polyclonal Antibody; Anti-TMOD2 Antibody Picoband; histone cluster 1 H3 family member a/b/c/d/e/f/g/h/i/j; Histone H3/a; Histone H3/b; Histone H3/c; Histone H3/d; Histone H3/f; Histone H3/h; Histone H3/I; Histone H3/j; Histone H3/k; Histone H3/l; HIST1H3A; HIST1H3B; HIST1H3C; HIST1H3D; HIST1H3E; HIST1H3F; HIST1H3G; HIST1H3H; HIST1H3I; HIST1H3J; H3FJ; anti-TMOD2 antibody

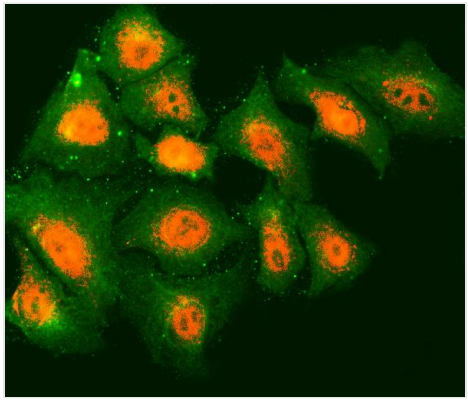
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Expressed in fetal brain, fetal lung, fetal liver, heart, brain, placenta, lung, liver, muscle, kidney and pancreas.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Applicable Applications for anti-TMOD2 antibody	ELISA, FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), WB (Western Blot)
Immunogen	E coli-derived human TMOD2 recombinant protein (Position: E111-K343).
Subcellular Localization	Cytoplasm
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Cross Reactivity	No cross-reactivity with other proteins.
Protein Function	Core component of nucleosome. Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machineries which require DNA as a template. Histones thereby play a central role in transcription regulation, DNA repair, DNA replication and chromosomal stability. DNA accessibility is regulated via a complex set of post-translational modifications of histones, also called histone code, and nucleosome remodeling.
Preparation and Storage	At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing.

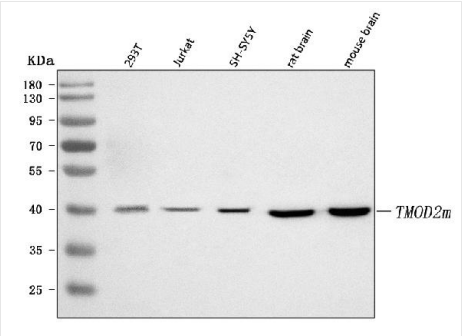
IMAGES



FCM/FACS (Flow Cytometry)
Figure 3. Flow Cytometry analysis of U20S cells using anti-TMOD2 antibody (AAA127762).Overlay histogram showing U20S cells stained with AAA127762 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-TMOD2 Antibody (AAA127762, 1ug/1x106 cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x106) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



IF (Immunofluorescence)
Figure 2. IF analysis of TMOD2 and Tubulin beta using anti-TMOD2 antibody (AAA127762) and anti-Tubulin beta antibody (M05613-4).TMOD2 and Tubulin beta was detected in an immunocytochemical section of A549 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5ug/mL rabbit anti-TMOD2 Antibody (AAA127762) and mouse anti-Tubulin beta Antibody (M05613-4) overnight at 4 degree C. Cy3 Conjugated Goat Anti-Rabbit IgG (BA1032) and DyLight488 Conjugated Goat Anti-Mouse IgG (BA1126) were used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37 degree C. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



WB (Western Blot)
Figure 1. Western blot analysis of TMOD2 using anti-TMOD2 antibody (AAA127762).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.Lane 1: human 293T whole cell lysates,Lane 2: human Jurkat whole cell lysates,Lane 3: human SH-SY5Y whole cell lysates,Lane 4: rat brain tissue lysates,Lane 5: mouse brain tissue lysates.After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-TMOD2 antigen affinity purified polyclonal antibody (#AAA127762) at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for TMOD2 at approximately 40 kDa. The expected band size for TMOD2 is at 40 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-TMOD2 antibody	The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Product Categories/Family for anti-TMOD2 antibody	Primary Antibodies; DNA/RNA; DNA Synthesis; Epigenetics and Nuclear Signaling; RNA Processing

References	1. Cox, P. R., Siddique, T., Zoghbi, H. Genomic organization of tropomodulins 2 and 4 and unusual intergenic and intraexonic splicing of YL-1 and tropomodulin 4. BMC Genomics 2: 7, 2001. Note: Electronic Article.2. Cox, P. R., Zoghbi, H. Y. Sequencing, expression analysis, and mapping of three unique human tropomodulin genes and their mouse orthologs. Genomics 63: 97-107, 2000. 3. Watakabe, A., Kobayashi, R., Helfman, D. M. N-tropomodulin: a novel isoform of tropomodulin identified as the major binding protein to brain tropomyosin. J. Cell Sci. 109: 2299-2310, 1996.

NCBI AND UNIPROT INFORMATION

NCBI GI #	71051529
NCBI GeneID	29767
UniProt Accession #	Q9NZR1; B4DEW6
Molecular Weight	35,648 Da
NCBI Official Full Name	TMOD2 protein
NCBI Official Synonym Full Names	tropomodulin 2
NCBI Official Symbol	TMOD2
NCBI Official Synonym Symbols	NTMOD; N-TMOD
NCBI Protein Information	tropomodulin-2
UniProt Protein Name	Tropomodulin-2
UniProt Gene Name	**TMOD2**
UniProt Synonym Gene Names	NTMOD; N-Tmod

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: https://stage.aaabiotech.com/polyclonal/tmod2-antibody-flow-cytometry-immunofluorescence-immunocytochemistry-western-blot-elisa/127762