

Rabbit TBR1 Polyclonal Antibody | anti-TBR1 antibody

Anti-TBR1 Antibody Picoband

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA127452	Rabbit	Human, Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Immunohistochemistry, Western Blot

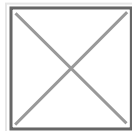
PRODUCT SYNONYMS

TBR1; Polyclonal Antibody; Anti-TBR1 Antibody Picoband; anti-TBR1 antibody

PRODUCT SPECIFICATIONS

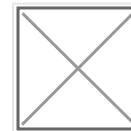
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Applicable Applications for anti-TBR1 antibody	ELISA, FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	E coli-derived human TBR1 recombinant protein (Position: K15-S682). Human TBR1 shares 99.3% amino acid (aa) sequence identity with mouse TBR1.
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
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 2. Flow Cytometry analysis of SH-SY5Y cells using anti-TBR1 antibody (AAA127452). Overlay histogram showing SH-SY5Y cells stained with AAA127452 (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-TBR1 Antibody (AAA127452, 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.



WB (Western Blot)

Figure 1. Western blot analysis of TBR1 using anti-TBR1 antibody (AAA127452). 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 SH-SY5Y whole cell lysates, Lane 2: rat brain tissue lysates, Lane 3: rat C6 whole cell lysates, Lane 4: mouse brain tissue lysates, Lane 5: mouse Neuro-2a whole cell 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-TBR1 antigen affinity purified polyclonal antibody (#AAA127452) 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 TBR1 at approximately 74 kDa. The expected band size for TBR1 is at 74 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-TBR1 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-TBR1 antibody	Primary Antibodies
References	1. Bulfone, A., Smiga, S. M., Shimamura, K., Peterson, A., Puellas, L., Rubenstein, J. L. R. T-brain-1: a homolog of Brachyury whose expression defines molecularly distinct domains within the cerebral cortex. Neuron 15: 63-78, 1995.2. den Hoed, J., Sollis, E., Venselaar, H., Estruch, S. B., Deriziotis, P., Fisher, S. E. Functional characterization of TBR1 variants in neurodevelopmental disorder. Sci. Rep. 8: 14279, 2018. 3. Deriziotis, P., O'Roak, B. J., Graham, S. A., Estruch, S. B., Dimitropoulou, D., Bernier, R. A., Gerdts, J., Shendure, J., Eichler, E. E., Fisher, S. E. De novo TBR1 mutations in sporadic autism disrupt protein functions. Nature Commun. 5: 4954, 2014. Note: Electronic Article.

NCBI AND UNIPROT INFORMATION

NCBI GI #	5730081
NCBI GeneID	10716
NCBI Accession #	NP_006584
NCBI GenBank Nucleotide #	NM_006593
UniProt Accession #	Q16650; Q14DC5; Q53TH0; Q56A81; B0AZS4; B2R6G5
Molecular Weight	42,332 Da
NCBI Official Full Name	T-box brain protein 1
NCBI Official Synonym Full Names	T-box, brain, 1
NCBI Official Symbol	TBR1
NCBI Official Synonym Symbols	TBR-1; TES-56
NCBI Protein Information	T-box brain protein 1; T-brain-1
UniProt Protein Name	T-box brain protein 1
UniProt Gene Name	TBR1
UniProt Synonym Gene Names	T-brain-1; TBR-1
UniProt Entry Name	TBR1_HUMAN

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.