

TBR1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP54563

Specification

TBR1 Polyclonal Antibody - Product Information

Application **Primary Accession**

Reactivity Host Clonality Calculated MW **Physical State** Immunogen

Epitope Specificity Isotype

affinity purified by Protein A

Purity

Buffer

SUBCELLULAR LOCATION **SIMILARITY** Important Note

WB, IHC-P, IHC-F, IF, ICC, E

016650

Rat, Pig, Dog, Bovine

Rabbit Polyclonal 74 KDa Liquid

KLH conjugated synthetic peptide derived

from human TBR1

35-130/682

laG

0.01M TBS (pH7.4) with 1% BSA, 0.02%

Proclin300 and 50% Glycerol.

Nuclea

Contains 1 T-box DNA-binding domain. This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Background Descriptions

A novel murine and human gene, TBR-1, encodes a putative transcription factor related to the Brachyrury (T) gene that is expressed only in postmitotic cells. T-brain-1 (TBR-1) mRNA is largely restricted to the cerebral cortex, where, during embryogenesis, it defines different regions that give rise to the palecortex, limbic cortex and neocortex (1-3). TBR-1, Pax-6 and Emx-1 are expressed in the mouse and chicken pallium. The pallio-subpallial boundary lies at the interface between the TBR-1 and DIx-2 expression domains. Chicken genes homolgous to these mouse genes are expressed in topologically comparable patterns during development, suggesting that mouse and chicken may have similar histogenetic specification processes and field homologies (4). CASK/LIN-2, a membrane-associated guanylate kinase, is required for EGFR localization and signaling. In adult rat brain, CASK is concentrated at neuronal synapses and binds to the cell-surface proteins. CASK can interact with TBR-1, which is involved in forebrain development. CASK enters into the nucleus and binds to a specific DNA sequence (the T-element) in a complex with TBR-1. Thus, CASK acts as a coactivator of TBR-1 to induce transcription of T-element containing genes, including reelin (5).

TBR1 Polyclonal Antibody - Additional Information

Gene ID 10716

Other Names

T-box brain protein 1, T-brain-1, TBR-1, TES-56, TBR1



Target/Specificity Brain.

Dilution

WB~~1:1000<br \><span class
="dilution_IHC-P">IHC-P~~N/A<br \><span class
="dilution_IHC-F">IHC-F~~N/A<br \><span class
="dilution_IF">IF~~1:50~200<br \>ICC~~N/A<br \>ICC~~N/A<br \>ICC~~N/A<br \>ICC~~N/A

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 $^{\circ}$ C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 $^{\circ}$ C.

TBR1 Polyclonal Antibody - Protein Information

Name TBR1

Function

Transcriptional repressor involved in multiple aspects of cortical development, including neuronal migration, laminar and areal identity, and axonal projection (PubMed:25232744, PubMed:30250039). As transcriptional repressor of FEZF2, it blocks the formation of the corticospinal (CS) tract from layer 6 projection neurons, thereby restricting the origin of CS axons specifically to layer 5 neurons (By similarity).

Cellular Location Nucleus

Tissue Location Brain.

TBR1 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

TBR1 Polyclonal Antibody - Images