**BACKGROUND**

A novel murine and human gene, TBR-1, encodes a putative transcription factor related to the Brachyury (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 paleocortex, limbic cortex and neocortex. 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 Dlx-2 expression domains. Chicken genes homologous to these mouse genes are expressed in topologically comparable and signaling. In adult rat brain, CASK is concentrated at neural synapses and binds to the cell-surface proteins. CASK can interact with TBR-1, which is involved in forebrain development. CASK/LIN-2, homologous to these mouse genes are expressed in topologically comparable and signaling.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: TBR1 (human) mapping to 2q24.2; Tbr1 (mouse) mapping to 2 C1.3.

**SOURCE**

TBR-1 (G-5) is a mouse monoclonal antibody raised against amino acids 1-200 mapping at the N-terminus of TBR-1 of mouse origin.

**PRODUCT**

Each vial contains 200 µg IgG2κ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-376258 X, 200 µg/0.1 ml.

TBR-1 (G-5) is available conjugated to agarose (sc-376258 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376258 HRP), 200 µg/ml, for WB, HRP (IP) and ELISA; to either phycoerythrin (sc-376258 PE), fluorescein (sc-376258 FITC), Alexa Fluor® 488 (sc-376258 AF488), Alexa Fluor® 546 (sc-376258 AF546), Alexa Fluor® 594 (sc-376258 AF594) or Alexa Fluor® 647 (sc-376258 AF647), 200 µg/ml, for WB (RGB), IF, HRP (IP) and ChIP; and to either Alexa Fluor® 680 (sc-376258 AF680) or Alexa Fluor® 790 (sc-376258 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and ChIP.

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**APPLICATIONS**

TBR-1 (G-5) is recommended for detection of TBR-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for TBR-1 siRNA (h): sc-44141, TBR-1 siRNA (m): sc-60034, TBR-1 shRNA Plasmid (h): sc-44141-SH, TBR-1 shRNA Plasmid (m): sc-60034-SH, TBR-1 shRNA (h) Lentiviral Particles: sc-44141-V and TBR-1 shRNA (m) Lentiviral Particles: sc-60034-V.

TBR-1 (G-5) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of TBR-1: 74 kDa.

Positive Controls: Neuro-2A whole cell lysate: sc-364185, H4 cell lysate: sc-2408 or RIN-m5F whole cell lysate: sc-364792.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000).

2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).


**DATA**

**STORAGE**

Store at 4°C. **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.