

Tara (S-13): sc-86900

BACKGROUND

Tara (Trio-associated repeat on actin), also known as TRIOBP (TRIO and F-actin-binding protein) or DFN28, is a widely expressed protein with highest levels of expression in heart and placenta. Tara localizes to the nucleus and cytoplasm. It contains a Pleckstrin homology domain at the N-terminus and a coiled-coil region at the C-terminus. Tara binds to and interacts with Trio, TRF1 and F-actin. Via these interactions, Tara plays a role in the development of neural tissue and the organization of the actin cytoskeleton. Tara functions to stabilize F-actin structures and therefore is also involved in the control of cell growth and motility. Mutations in the gene encoding this protein may result in autosomal recessive nonsyndromic sensorineural deafness type 28 (DFNB28). Five isoforms exist for Tara due to alternative splicing. Isoform 3, also known as the long isoform, is exclusively expressed in fetal retina, cochlea and brain.

REFERENCES

- Seipel, K., et al. 2001. Tara, a novel F-actin binding protein, associates with the Trio guanine nucleotide exchange factor and regulates actin cytoskeletal organization. *J. Cell Sci.* 114: 389-399.
- Hirosawa, M., et al. 2001. Identification of novel transcribed sequences on human chromosome 22 by expressed sequence tag mapping. *DNA Res.* 8: 1-9.
- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 609823. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Lan, J.P., et al. 2004. Isolation of Tara protein and its gene cloning. 33: 486-490.
- Riazuddin, S., et al. 2005. Mutations in TRIOBP, which encodes a putative cytoskeletal-organizing protein, are associated with nonsyndromic recessive deafness. *Am. J. Hum. Genet.* 78: 137-143.

CHROMOSOMAL LOCATION

Genetic locus: TRIOBP (human) mapping to 22q13.1; Triobp (mouse) mapping to 15 E1.

SOURCE

Tara (S-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of Tara of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-86900 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Tara (S-13) is recommended for detection of Tara of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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); non cross-reactive with Tara-5.

Suitable for use as control antibody for Tara siRNA (h): sc-76630, Tara siRNA (m): sc-154071, Tara shRNA Plasmid (h): sc-76630-SH, Tara shRNA Plasmid (m): sc-154071-SH, Tara shRNA (h) Lentiviral Particles: sc-76630-V and Tara shRNA (m) Lentiviral Particles: sc-154071-V.

Molecular Weight of Tara isoform 1: 68 kDa.

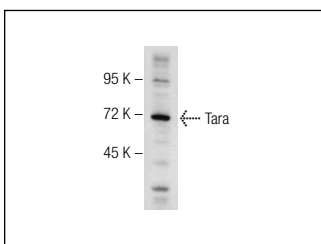
Molecular Weight of Tara additional isoforms 2-5: 261/250/243/125 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or mouse kidney extract: sc-2255.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Tara (S-13): sc-86900. Western blot analysis of Tara expression in HeLa whole cell lysates.

RESEARCH USE

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

MONOS
Satisfaction
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Try **Tara (G-9): sc-377474** or **Tara (2438C1a): sc-81128**, our highly recommended monoclonal alternatives to Tara (S-13).