

Tara (H-70): sc-135422

BACKGROUND

Tara (trio-associated repeat on Actin), also known as TRIOBP (TRIO and F-Actin-binding protein) or DFNB28, 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. *Zhejiang Da Xue Xue Bao Yi Xue Ban* 33: 486-490.
- Shahin, H., et al. 2005. Mutations in a novel isoform of TRIOBP that encodes a filamentous-actin binding protein are responsible for DFNB28 recessive nonsyndromic hearing loss. *Am. J. Hum. Genet.* 78: 144-152.

CHROMOSOMAL LOCATION

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

SOURCE

Tara (H-70) is a rabbit polyclonal antibody raised against amino acids 2214-2283 mapping near the C-terminus of Tara of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

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.

APPLICATIONS

Tara (H-70) 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).

Tara (H-70) is also recommended for detection of Tara in additional species, including equine, canine, bovine and porcine.

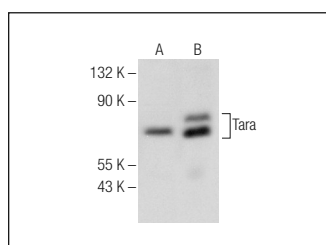
Suitable for use as control antibody for Tara siRNA (h): sc-76630, Tara siRNA (m): sc-154071, Tara shRNA Plasmid (h): sc-76630-SH, Tara shRNA Plasmid (m): sc-154071-SH, Tara shRNA (h) Lentiviral Particles: sc-76630-V and Tara shRNA (m) Lentiviral Particles: sc-154071-V.

Molecular Weight of Tara isoform 1: 68 kDa.

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

Positive Controls: HeLa whole cell lysate: sc-2200, T24 cell lysate: sc-2292 or mouse kidney extract: sc-2255.

DATA



Tara (H-70): sc-135422. Western blot analysis of Tara expression in HeLa (A) and T24 (B) whole cell lysates.

PROTOCOLS

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