

TRAPPC4 (H-145): sc-292011

BACKGROUND

TRAPPC4 (trafficking protein particle complex 4), also known as SBDN, TRS23, PTD009, CGI-104, HSPC172 (hematopoietic stem/progenitor cell protein 172) or SYNBINDIN, is a postsynaptic protein belonging to the TRAPPC4 subfamily of the TRAPP small subunits family of proteins. Expressed in neurons and localizing to the Golgi apparatus, TRAPPC4 is believed to be involved in vesicular transport from the endoplasmic reticulum (ER) to the Golgi, functioning as a component of the multisubunit transport protein particle (TRAPP) complex. Similar to other proteins involved in vesicular transport or synaptic function, TRAPPC4 contains a nonclassical PDZ domain, a TRAPPC1-like domain and a C-terminus that is similar to a short segment of RyR. Via its nonclassical PDZ domain, TRAPPC4 binds to the C-terminal EFYA motif of Syndecan-2, suggesting that TRAPPC4 may play an important role in dendritic spine morphogenesis through membrane-trafficking.

REFERENCES

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- Lai, C.H., et al. 2000. Identification of novel human genes evolutionarily conserved in *Caenorhabditis elegans* by comparative proteomics. *Genome Res.* 10: 703-713.
- Simons, M., et al. 2001. Syndecan-4-mediated signalling. *Cell. Signal.* 13: 855-862.
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- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 610971. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Katoh, M., et al. 2003. Identification and characterization of human LL5A gene and mouse Ll5a gene in silico. *Int. J. Oncol.* 23: 1477-1483.
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CHROMOSOMAL LOCATION

Genetic locus: TRAPPC4 (human) mapping to 11q23.3; Trappc4 (mouse) mapping to 9 A5.2.

SOURCE

TRAPPC4 (H-145) is a rabbit polyclonal antibody raised against amino acids 1-145 mapping at the N-terminus of TRAPPC4 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.

APPLICATIONS

TRAPPC4 (H-145) is recommended for detection of TRAPPC4 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).

TRAPPC4 (H-145) is also recommended for detection of TRAPPC4 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for TRAPPC4 siRNA (h): sc-96374, TRAPPC4 siRNA (m): sc-154587, TRAPPC4 shRNA Plasmid (h): sc-96374-SH, TRAPPC4 shRNA Plasmid (m): sc-154587-SH, TRAPPC4 shRNA (h) Lentiviral Particles: sc-96374-V and TRAPPC4 shRNA (m) Lentiviral Particles: sc-154587-V.

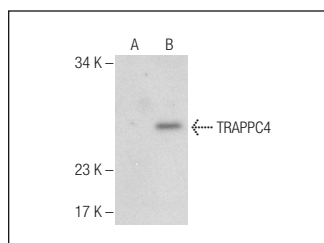
Molecular Weight of TRAPPC4: 24 kDa.

Positive Controls: TRAPPC4 (m) 293T Lysate: sc-124264, HeLa whole cell lysate: sc-2200 or HL-60 whole cell lysate: sc-2209.

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



TRAPPC4 (H-145): sc-292011. Western blot analysis of TRAPPC4 expression in non-transfected: sc-117752 (A) and mouse TRAPPC4 transfected: sc-124264 (B) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.