

Tppp antibody - C-terminal region

Rabbit Polyclonal Antibody Catalog # Al11269

Specification

Tppp antibody - C-terminal region - Product Information

Application WB
Primary Accession O7TOD2

Other Accession NM 182839, NP 878259

Reactivity Human, Mouse, Rat, Rabbit, Pig, Horse,

Bovine, Dog

Predicted Human, Mouse, Rat, Rabbit, Pig, Chicken,

Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 24kDa KDa

Tppp antibody - C-terminal region - Additional Information

Gene ID 72948

Alias Symbol Al849835, 2900041A09Rik

Other Names

Tubulin polymerization-promoting protein, TPPP, Tppp

Format

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage

Add 100 ul of distilled water. Final anti-Tppp antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions

Tppp antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Tppp antibody - C-terminal region - Protein Information

Name Tppp {ECO:0000303|PubMed:18028908, ECO:0000312|MGI:MGI:1920198}

Function

Regulator of microtubule dynamics that plays a key role in myelination by promoting elongation of the myelin sheath (PubMed:31522887). Acts as a microtubule nucleation factor in oligodendrocytes: specifically localizes to the postsynaptic Golgi apparatus region, also named Golgi outpost, and promotes microtubule nucleation, an important step for elongation of the myelin sheath (PubMed:31522887). Required for both uniform polarized growth of distal microtubules as well as directing the



branching of proximal processes (PubMed:31522887). Shows magnesium-dependent GTPase activity; the role of the GTPase activity is unclear (By similarity). In addition to microtubule nucleation activity, also involved in microtubule bundling and stabilization of existing microtubules, thereby maintaining the integrity of the microtubule network (PubMed:18028908). Regulates microtubule dynamics by promoting tubulin acetylation: acts by inhibiting the tubulin deacetylase activity of HDAC6 (By similarity). Also regulates cell migration: phosphorylation by ROCK1 inhibits interaction with HDAC6, resulting in decreased acetylation of tubulin and increased cell motility (By similarity). Plays a role in cell proliferation by regulating the G1/S-phase transition (By similarity). Involved in astral microtubule organization and mitotic spindle orientation during early stage of mitosis; this process is regulated by phosphorylation by LIMK2 (By similarity).

Cellular Location

Golgi outpost {ECO:0000250|UniProtKB:D3ZQL7}. Cytoplasm, cytoskeleton, microtubule organizing center {ECO:0000250|UniProtKB:D3ZQL7}. Cytoplasm, cytoskeleton. Nucleus Cytoplasm, cytoskeleton, spindle {ECO:0000250|UniProtKB:O94811} Note=Specifically localizes to the postsynaptic Golgi apparatus region, also named Golgi outpost, which shapes dendrite morphology by functioning as sites of acentrosomal microtubule nucleation (By similarity). Mainly localizes to the cytoskeleton (PubMed:18028908) Also found in the nucleus; however, nuclear localization is unclear and requires additional evidences (PubMed:18028908). Localizes to glial Lewy bodies in the brains of individuals with synucleinopathies. During mitosis, colocalizes with LIMK2 at the mitotic spindle (By similarity) {ECO:0000250|UniProtKB:D3ZQL7, ECO:0000250|UniProtKB:O94811, ECO:0000269|PubMed:18028908}

Tissue Location

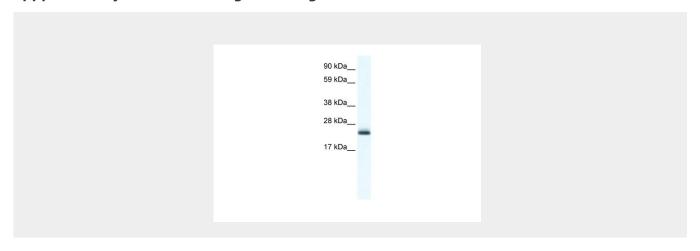
Widely expressed with higher expression in brain (at protein level).

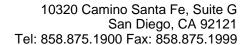
Tppp antibody - C-terminal region - Protocols

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

Tppp antibody - C-terminal region - Images







WB Suggested Anti-Tppp Antibody Titration: 1.25µg/ml

ELISA Titer: 1:312500

Positive Control: Human brain

Tppp antibody - C-terminal region - References

Tirian,L., et al., (2003) Proc. Natl. Acad. Sci. U.S.A. 100 (24), 13976-13981Reconstitution and Storage:For short term use, store at 2-8C up to 1 week. For long term storage, store at -20C in small aliquots to prevent freeze-thaw cycles.