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Tppp antibody - C-terminal region

Rabbit Polyclonal Antibody
Catalog # AI11269

Product Information

Application	WB
Primary Accession	Q7TQD2
Other Accession	NM_182839, NP_878259
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Dog, Horse, Bovine
Predicted	Human, Mouse, Rat, Rabbit, Pig, Chicken, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	23575

Additional Information

Gene ID	72948
Alias Symbol	AI849835, 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.

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 evidence (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).

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.

Images



WB Suggested Anti-Tppp Antibody Titration: 1.25µg/ml
ELISA Titer: 1:312500
Positive Control: Human brain

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.