

TPPP Antibody (Internal)
Goat Polyclonal Antibody
Catalog # ALS15786**Specification****TPPP Antibody (Internal) - Product Information**

Application	WB
Primary Accession	O94811
Reactivity	Human, Monkey
Host	Goat
Clonality	Polyclonal
Calculated MW	24kDa KDa

TPPP Antibody (Internal) - Additional Information**Gene ID** 11076**Other Names**

Tubulin polymerization-promoting protein, TPPP, 25 kDa brain-specific protein, TPPP/p25, p24, p25-alpha, TPPP, TPPP1

Target/Specificity

Human TPPP.

Reconstitution & Storage

Store at -20°C. Minimize freezing and thawing.

Precautions

TPPP Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

TPPP Antibody (Internal) - Protein Information**Name** TPPP {ECO:0000303|PubMed:17105200, ECO:0000312|HGNC:HGNC:24164}**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, PubMed:33831707). 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 (PubMed:21995432, PubMed:21316364).

target="_blank">21316364). 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:17105200, PubMed:17693641, PubMed:18028908, PubMed:26289831). Regulates microtubule dynamics by promoting tubulin acetylation: acts by inhibiting the tubulin deacetylase activity of HDAC6 (PubMed:20308065, PubMed:23093407). Also regulates cell migration: phosphorylation by ROCK1 inhibits interaction with HDAC6, resulting in decreased acetylation of tubulin and increased cell motility (PubMed:23093407). Plays a role in cell proliferation by regulating the G1/S-phase transition (PubMed:23355470). Involved in astral microtubule organization and mitotic spindle orientation during early stage of mitosis; this process is regulated by phosphorylation by LIMK2 (PubMed:22328514).

Cellular Location

Golgi outpost {ECO:0000250|UniProtKB:D3ZQL7}. Cytoplasm, cytoskeleton, microtubule organizing center {ECO:0000250|UniProtKB:D3ZQL7}. Cytoplasm, cytoskeleton. Nucleus Cytoplasm, cytoskeleton, spindle 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 (PubMed:15590652, PubMed:17027006). During mitosis, colocalizes with LIMK2 at the mitotic spindle (PubMed:22328514) {ECO:0000250|UniProtKB:D3ZQL7, ECO:0000269|PubMed:15590652, ECO:0000269|PubMed:17027006, ECO:0000269|PubMed:18028908, ECO:0000269|PubMed:22328514}

Tissue Location

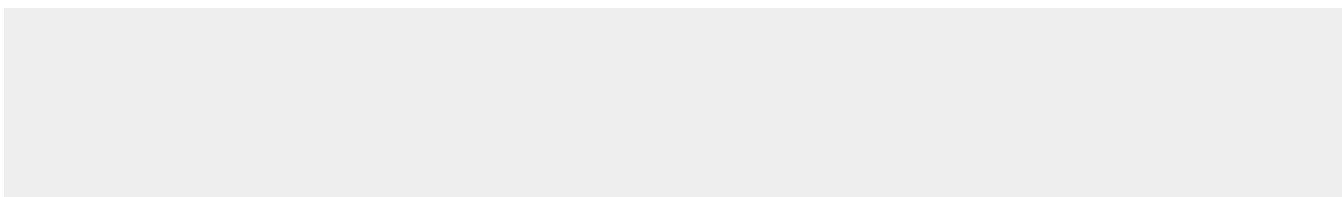
Widely expressed..

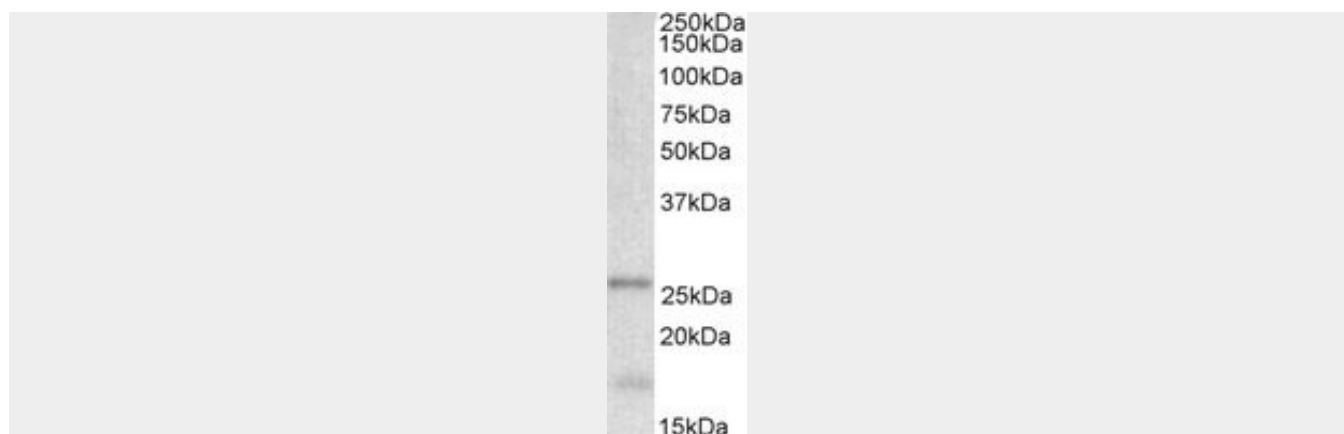
TPPP Antibody (Internal) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

TPPP Antibody (Internal) - Images





TPPP antibody (0.001 ug/ml) staining of Human Cerebellum lysate (35 ug protein/ml in RIPA buffer).

TPPP Antibody (Internal) - Background

May play a role in the polymerization of tubulin into microtubules, microtubule bundling and the stabilization of existing microtubules, thus maintaining the integrity of the microtubule network. May play a role in mitotic spindle assembly and nuclear envelope breakdown.

TPPP Antibody (Internal) - References

Seki N.,et al.J. Hum. Genet. 44:121-122(1999).
Kalnine N.,et al.Submitted (OCT-2004) to the EMBL/GenBank/DDBJ databases.
Lindersson E.,et al.J. Biol. Chem. 280:5703-5715(2005).
Vincze O.,et al.Biochemistry 45:13818-13826(2006).
Olah J.,et al.FEBS Lett. 580:5807-5814(2006).