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# TPPP Rabbit mAb

Catalog # AP78138

## Product Information

| | |
|---|---|
| **Application** | WB, IHC-P, IF, FC, ICC |
| **Primary Accession** | O94811 |
| **Reactivity** | Rat, Human, Mouse |
| **Host** | Rabbit |
| **Clonality** | Monoclonal Antibody |
| **Isotype** | IgG |
| **Conjugate** | Unconjugated |
| **Immunogen** | A synthesized peptide derived from human TPPP |
| **Purification** | Affinity Chromatography |
| **Calculated MW** | 23694 |

## Additional Information

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|---|---|
| **Gene ID** | 11076 |
| **Other Names** | TPPP |
| **Dilution** | WB~~1/500-1/1000 IHC-P~~N/A IF~~1:50~200 FC~~1:10~50 ICC~~N/A |
| **Format** | Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02% sodium azide and 50% glycerol. |
| **Storage** | Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles. |

## 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:21316364, PubMed:21995432). 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).

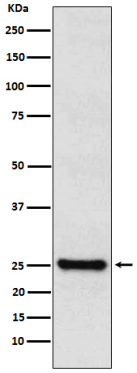
**Cellular Location**

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 evidence (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..

## Images




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