

Mapre1 antibody - C-terminal region

Rabbit Polyclonal Antibody Catalog # AI14714

Product Information

Application WB Primary Accession Q61166

Other Accession <u>NM_007896</u>, <u>NP_031922</u>

Reactivity Human, Mouse, Rat, Rabbit, Goat, Dog, Guinea Pig, Horse, Bovine

Predicted Mouse, Pig, Dog

Host Rabbit
Clonality Polyclonal
Calculated MW 30016

Additional Information

Gene ID 13589

Alias Symbol 5530600P05Rik, AI462499, AI504412, AW260097, BIM1p, D2Ertd459e, Eb1

Other Names Microtubule-associated protein RP/EB family member 1, APC-binding protein

EB1, End-binding protein 1, EB1, Mapre1

EBT, Elia-billating protein 1, EBT, Mapre

Format Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium

azide and 2% sucrose.

Reconstitution & Storage Add 50 ul of distilled water. Final anti-Mapre1 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 Mapre1 antibody - C-terminal region is for research use only and not for use

in diagnostic or therapeutic procedures.

Protein Information

Name Mapre1

Function Plus-end tracking protein (+TIP) that binds to the plus-end of microtubules

and regulates the dynamics of the microtubule cytoskeleton. Recruits other +TIP proteins to microtubules by binding to a conserved Ser-X-Leu-Pro (SXLP)

motif in their polypeptide chains. Promotes cytoplasmic microtubule nucleation and elongation. Involved in mitotic spindle positioning by

stabilizing microtubules and promoting dynamic connection between astral microtubules and the cortex during mitotic chromosome segregation. Assists chromosome alignment in metaphase by recruiting the SKA complex to the spindle and stabilizing its interactions with microtubule bundles (K-fibers). Also acts as a regulator of minus-end microtubule organization: interacts with

the complex formed by AKAP9 and PDE4DIP, leading to recruit CAMSAP2 to the Golgi apparatus, thereby tethering non-centrosomal minus-end microtubules to the Golgi, an important step for polarized cell movement. Promotes elongation of CAMSAP2-decorated microtubule stretches on the minus-end of microtubules. Acts as a regulator of autophagosome transport via interaction with CAMSAP2 (By similarity). Functions downstream of Rho GTPases and DIAPH1 in stable microtubule formation (PubMed:15311282). May play a role in cell migration (PubMed:15311282).

Cellular Location

Cytoplasm, cytoskeleton. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome {ECO:0000250|UniProtKB:Q15691} Cytoplasm, cytoskeleton, spindle {ECO:0000250|UniProtKB:Q15691} Cytoplasm, cytoskeleton, spindle pole {ECO:0000250|UniProtKB:Q15691} Note=Associated with the microtubule network at the growing distal tip of microtubules (PubMed:21357749). In addition to localizing to microtubule plus-ends, also exhibits some localization along the length of the microtubules (By similarity). Also enriched at the centrosome (By similarity). {ECO:0000250|UniProtKB:Q15691, ECO:0000269|PubMed:21357749}

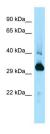
Tissue Location

Expressed within the midpiece of sperm tail (at protein level).

References

Sparks A.B.,et al.Submitted (MAR-1996) to the EMBL/GenBank/DDBJ databases. Bienvenut W.V.,et al.Submitted (FEB-2008) to UniProtKB. Wen Y.,et al.Nat. Cell Biol. 6:820-830(2004). Wu X.,et al.Cell 135:137-148(2008). Fong K.W.,et al.Mol. Biol. Cell 20:3660-3670(2009).

Images



WB Suggested Anti-Mapre1 Antibody Titration: 1.0 μg/ml Positive Control: Mouse Spleen

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