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MAPRE1 Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP6770a

Specification

MAPRE1 Antibody (N-term) Blocking peptide - Product Information

Primary Accession	Q15691
Other Accession	NP_036457.1

MAPRE1 Antibody (N-term) Blocking peptide - Additional Information

Gene ID 22919

Other Names
Microtubule-associated protein RP/EB family member 1, APC-binding protein EB1, End-binding protein 1, EB1, MAPRE1

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

MAPRE1 Antibody (N-term) Blocking peptide - Protein Information

Name MAPRE1 (HGNC:6890)

Function
Plus-end tracking protein (+TIP) that binds to the plus-end of microtubules and regulates the dynamics of the microtubule cytoskeleton (PubMed:12388762, PubMed:16109370, PubMed:19632184, PubMed:21646404, PubMed:23001180, PubMed:28726242, PubMed:28814570, PubMed:34608293). Promotes cytoplasmic microtubule nucleation and elongation (PubMed:12388762, PubMed:16109370, PubMed:19632184, PubMed:21646404, PubMed:28726242, PubMed:<a

href="http://www.uniprot.org/citations/28814570" target="_blank">28814570). Involved in mitotic spindle positioning by stabilizing microtubules and promoting dynamic connection between astral microtubules and the cortex during mitotic chromosome segregation (PubMed:12388762, PubMed:34608293). 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 (PubMed:28814570). Promotes elongation of CAMSAP2-decorated microtubule stretches on the minus-end of microtubules (PubMed:28814570). Acts as a regulator of autophagosome transport via interaction with CAMSAP2 (PubMed:28726242). Functions downstream of Rho GTPases and DIAPH1 in stable microtubule formation (By similarity). May play a role in cell migration (By similarity).

Cellular Location
Cytoplasm, cytoskeleton. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Golgi apparatus. Cytoplasm, cytoskeleton, spindle. Cytoplasm, cytoskeleton, spindle pole. Note=Associated with the microtubule growing distal tips (PubMed:28814570). Recruitment to the Golgi apparatus requires the presence of PDE4DIP isoform 13/MMG8/SMYLE (PubMed:25217626).

Tissue Location
Ubiquitously expressed.

MAPRE1 Antibody (N-term) Blocking peptide - Protocols

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

- Blocking Peptides

MAPRE1 Antibody (N-term) Blocking peptide - Images

MAPRE1 Antibody (N-term) Blocking peptide - Background

The protein encoded by this gene was first identified byits binding to the APC protein which is often mutated in familialand sporadic forms of colorectal cancer. This protein localizes tomicrotubules, especially the growing ends, in interphase cells.During mitosis, the protein is associated with the centrosomes andspindle microtubules. The protein also associates with componentsof the dynactin complex and the intermediate chain of cytoplasmicdynein. Because of these associations, it is thought that thisprotein is involved in the regulation of microtubule structures andchromosome stability. This gene is a member of the RP/EB family.

MAPRE1 Antibody (N-term) Blocking peptide - References

Jaulin, F., et al. J. Cell Biol. 190(3):443-460(2010)Olson, J.E., et al. Breast Cancer Res. Treat. (2010) In press :De Groot, C.O., et al. J. Biol. Chem. 285(8):5802-5814(2010)Jiang, K., et al. EMBO Rep. 10(8):857-865(2009)Honnappa, S., et al. Cell 138(2):366-376(2009)