

**MAPRE1 Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP6770a****Specification**

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**MAPRE1 Antibody (N-term) - Product Information**

Application	WB, IHC-P, FC,E
Primary Accession	<a href="#">Q15691</a>
Other Accession	<a href="#">Q7ZXP1</a> , <a href="#">Q3B8Q0</a> , <a href="#">Q8R001</a> , <a href="#">Q15555</a> , <a href="#">Q5ZKK1</a> , <a href="#">Q3SZP2</a> , <a href="#">Q66HR2</a> , <a href="#">Q61166</a> , <a href="#">Q5ZLC7</a> , <a href="#">Q3ZBD9</a> , <a href="#">NP_036457.1</a>
Reactivity	Human, Mouse
Predicted	Bovine, Chicken, Rat, Xenopus
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	29999
Antigen Region	44-71

**MAPRE1 Antibody (N-term) - 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

**Target/Specificity**

This MAPRE1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 44-71 amino acids from the N-terminal region of human MAPRE1.

**Dilution**WB~~1:1000  
IHC-P~~1:50~100  
FC~~1:10~50**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

MAPRE1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**MAPRE1 Antibody (N-term) - 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:[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).

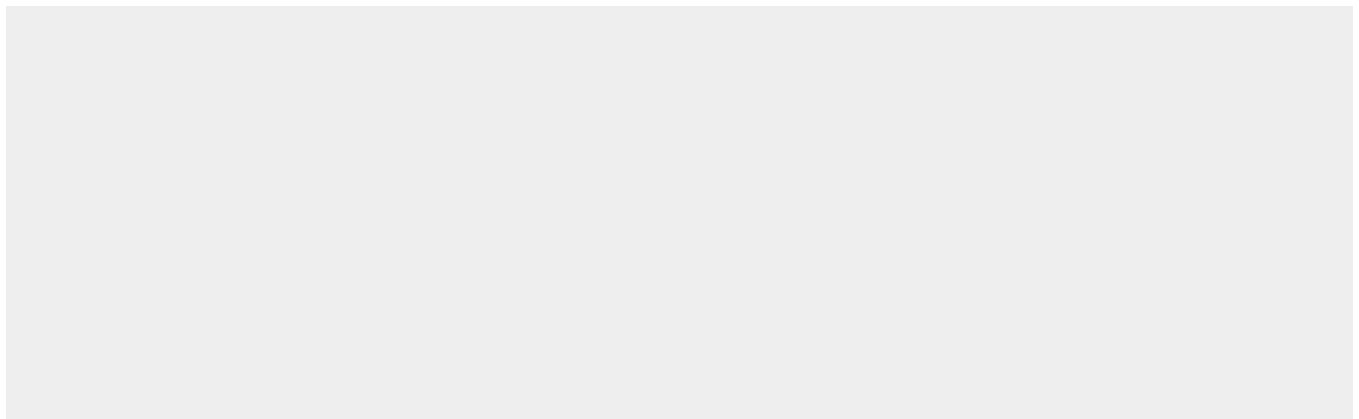
**Tissue Location**

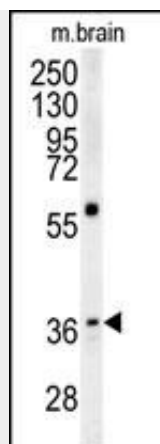
Ubiquitously expressed.

**MAPRE1 Antibody (N-term) - Protocols**

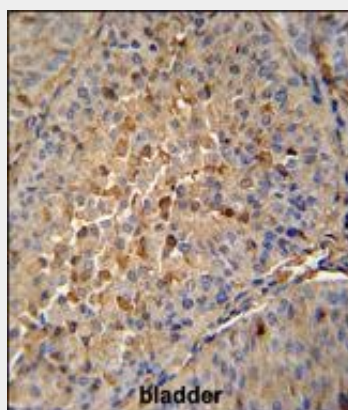
Provided below are standard protocols that you may find useful for product applications.

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

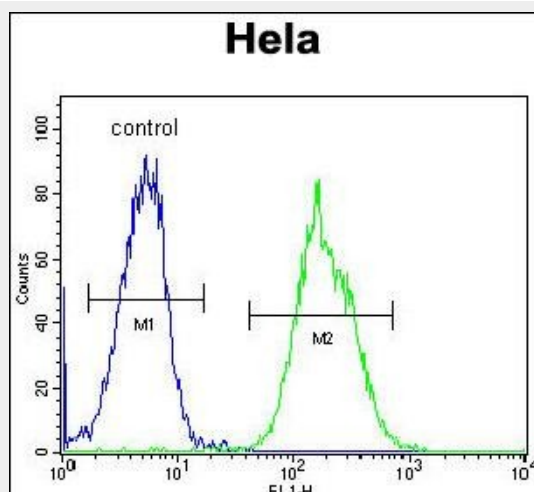
**MAPRE1 Antibody (N-term) - Images**



MAPRE1 Antibody (N-term) (Cat. #AP6770a) western blot analysis in mouse brain tissue lysates (15ug/lane). This demonstrates the MAPRE1 antibody detected MAPRE1 protein (arrow).



MAPRE1 antibody (N-term) (Cat. #AP6770a) immunohistochemistry analysis in formalin fixed and paraffin embedded human bladder carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the MAPRE1 antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



MAPRE1 Antibody (N-term) (Cat. #AP6770a) flow cytometric analysis of HeLa cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

#### MAPRE1 Antibody (N-term) - Background

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

#### **MAPRE1 Antibody (N-term) - 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)  
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