10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

MAPRE2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14769a

Product Information

Application	WB, E
Primary Accession	Q15555
Other Accession	Q7ZXP1, Q3B8Q0, Q8R001, Q5ZKK1, Q3SZP2, NP_001137299.1, NP_055083.1, NP_001137298.1
Reactivity	Human
Predicted	Bovine, Chicken, Mouse, Rat, Xenopus
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB35036
Calculated MW	37031
Antigen Region	12-40

Additional Information

Gene ID	10982
Other Names	Microtubule-associated protein RP/EB family member 2, APC-binding protein EB2, End-binding protein 2, EB2, MAPRE2, RP1
Target/Specificity	This MAPRE2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 12-40 amino acids from the N-terminal region of human MAPRE2.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
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	MAPRE2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MAPRE2
Synonyms	RP1

Function	Adapter protein that is involved in microtubule polymerization, and spindle function by stabilizing microtubules and anchoring them at centrosomes. Therefore, ensures mitotic progression and genome stability (PubMed:27030108). Acts as a central regulator of microtubule reorganization in apico-basal epithelial differentiation (By similarity). Plays a role during oocyte meiosis by regulating microtubule dynamics (By similarity). Participates in neurite growth by interacting with plexin B3/PLXNB3 and microtubule reorganization during apico-basal epithelial differentiation (PubMed:22373814). Also plays an essential role for cell migration and focal adhesion dynamics. Mechanistically, recruits HAX1 to microtubules in order to regulate focal adhesion dynamics (PubMed:26527684).
Cellular Location	Cytoplasm, cytoskeleton. Note=Associated with the microtubule network. Accumulates at the plus end of microtubules
Tissue Location	Expressed in different tumor cell lines. Up- regulated in activated B- and T-lymphocytes

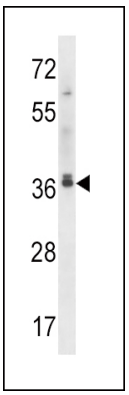
Background

The protein encoded by this gene shares significant homology to the adenomatous polyposis coli (APC) protein-binding EB1 gene family. The function of this protein is unknown; however, its homology suggests involvement in tumorigenesis of colorectal cancers and proliferative control of normal cells. This gene may belong to the intermediate/early gene family, involved in the signal transduction cascade downstream of the TCR. Alternative splicing results in multiple transcript variants. [provided by RefSeq].

References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
De Groot, C.O., et al. J. Biol. Chem. 285(8):5802-5814(2010)
Zhu, Z.C., et al. J. Biol. Chem. 284(47):32651-32661(2009)
Abiatari, I., et al. Int. J. Oncol. 35(5):1111-1116(2009)
Manna, T., et al. Biochemistry 47(2):779-786(2008)

Images



MAPRE2 Antibody (N-term) (Cat. #AP14769a) western blot analysis in CEM cell line lysates (35ug/lane).This demonstrates the MAPRE2 antibody detected the MAPRE2 protein (arrow).