

# **MAPRE2 Antibody (N-term)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14769a

### **Specification**

## MAPRE2 Antibody (N-term) - Product Information

Application WB,E
Primary Accession O15555

Other Accession <u>Q7ZXP1</u>, <u>Q3B8Q0</u>, <u>Q8R001</u>, <u>Q5ZKK1</u>, <u>Q3SZP2</u>,

NP 001137299.1, NP 055083.1,

NP 001137298.1

Reactivity Human

Predicted Bovine, Chicken, Mouse, Rat, Xenopus

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 37031
Antigen Region 12-40

### MAPRE2 Antibody (N-term) - 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.

## MAPRE2 Antibody (N-term) - 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**

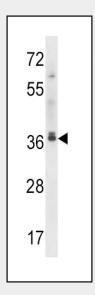
Expressed in different tumor cell lines. Up-regulated in activated B- and T-lymphocytes

## MAPRE2 Antibody (N-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

### MAPRE2 Antibody (N-term) - 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).

# MAPRE2 Antibody (N-term) - 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].

## MAPRE2 Antibody (N-term) - 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)