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Anti-EB3 Antibody

Catalog # AP52003

Product Information

Application	WB, IF/IC
Primary Accession	Q9UPY8
Reactivity	Human, Mouse, Rat, Bovine, Mk
Host	Rabbit
Clonality	Polyclonal
Calculated MW	31982

Additional Information

Gene ID	22924
Other Names	Microtubule-associated protein RP/EB family member 3; EB1 protein family member 3; EBF3; End-binding protein 3; EB3; RP3
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human EB3. The exact sequence is proprietary.
Dilution	WB~~ 1:8000 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

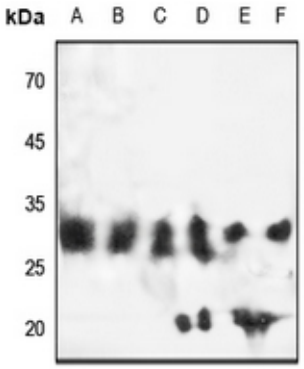
Name	MAPRE3
Function	Plus-end tracking protein (+TIP) that binds to the plus-end of microtubules and regulates the dynamics of the microtubule cytoskeleton (PubMed:19255245, PubMed:28814570). Promotes microtubule growth (PubMed:19255245, PubMed:28814570). May be involved in spindle function by stabilizing microtubules and anchoring them at centrosomes (PubMed:19255245, PubMed:28814570). 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).
Cellular Location	Cytoplasm, cytoskeleton. Note=Associated with the microtubule network. Detected at the plus end of microtubules

Tissue Location	Predominantly expressed in brain and muscle.

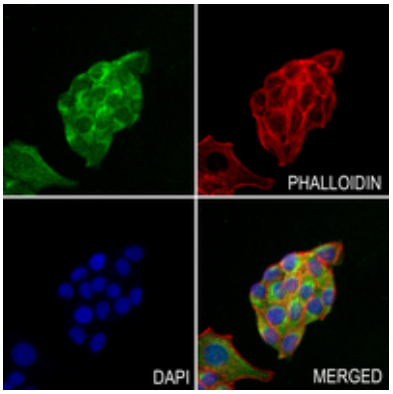
References

Nakagawa H.,et al.Oncogene 19:210-216(2000).
Su L.-K.,et al.Genomics 71:142-149(2001).
Halleck A.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
Hillier L.W.,et al.Nature 434:724-731(2005).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.

Images



Western blot analysis of EB3 expression in HEK293T (A), Hela (B), DLD (C), moues brain (D), mouse muscle (E), rat muscle (F) whole cell lysates. (Predicted band size: 31 kD; Observed band size: 32 kD)



Immunofluorescent analysis of EB3 staining in HepG2 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

Citations

- Decreased tubulin-binding cofactor B was involved in the formation disorder of nascent astrocyte processes by regulating microtubule plus-end growth through binding with end-binding proteins 1 and 3 after chronic alcohol exposure
- Coronary anatomy and function: a story of Yin and Yang

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