

Rat EB3 Monoclonal Antibody | anti-EB3 antibody

EB3 (KT36) Antibody

CATALOG # AAA71629	HOST Rat	REACTIVITY Human, Rat, Mouse	APPLICATIONS Immunocytochemistry, ELISA, Western Blot
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PRODUCT SYNONYMS

EB3; Monoclonal Antibody; EB3 (KT36) Antibody; EB3 11; anti-EB3 antibody

PRODUCT SPECIFICATIONS

Host	Rat
Reactivity	Human, Rat, Mouse
Clonality	Monoclonal
Isotype	IgG2a
Clone Number	KT36
Specificity	The antibody detects a 32kDa* prtoein corresponding to the molecular mass of EB3 on SDS-PAGE immunoblots of human HeLa cells and mouse brain tissue. The antibody also detects EB3 by immunocytochemistry in HeLa and A431 cells.
Purity/Purification	Protein G chromatography
Form/Format	Rat monoclonal antibody purified with protein G chromatography is supplied in 100ul phosphate-buffered saline and 0.05% sodium azide.
Applicable Applications for anti-EB3 antibody	ICC (Immunocytochemistry), ELISA, WB (Western Blot)
Immunogen	Clone KT36 was generated from a GST fusion protein containing human EB3. This sequence is highly conserved in rat and mouse EB3.
Preparation and Storage	Aliquot and store at -20 degree C. Stable for 1 year.

IMAGES



ICC (Immunocytochemistry)

Immunocytochemical labeling of EB3 in paraformaldehyde-fixed and NP40-permeabilized A431 cells. The cells were dual labeled with mouse monoclonal anti-alpha-Tubulin (TM4111) (green) and rat monoclonal anti-EB3 (EM5091) (red). The antibodies were detected using either goat anti-mouse:DyLight 488 (MS3011) or goat anti-Rat:DyLight 594 (RS3111).



WB (Western Blot)

Western blot of EB proteins in mouse brain (lanes 1-5). The blot was probed with rat monoclonals EM5041 anti-EB1 (lane 1), EM5061 anti-EB1/2/3 (lane 2), EM5081 anti-EB2 (lane 3), EM5101 anti-EB3 (lane 4), and EM5091 anti-EB3 (lane 5). Then the antibodies were detected using goat anti-Rat IgG Light Chain specific:HRP (RS3121).

ADDITIONAL INFORMATION

Related Product Information for anti-EB3 antibody	Microtubules (MTs) are oriented with a fast growing plus-end and a slower growing minus-end. The MT plus-end is a crucial site for the regulation of MT dynamics and MT association with different cellular organelles by several groups of plus-end tracking proteins (+TIPs). These +TIPs form comet-like accumulations at the plus ends of MTs to regulate MT dynamics and interactions. The +TIPs include diverse groups of proteins, such as motor and nonmotor proteins, MT polymerases and depolymerases as well as various regulatory and adaptor proteins. The End-Binding (EB) family of +TIPs includes EB1 (MAPRE1), EB2 (MAPRE2, RP1), and EB3 (MAPRE3, EBF3). EB proteins are ubiquitously expressed +TIPs that can dimerize through a coiled-coil C-terminal region, and bind MTs through an N-terminal calponin homology domain. EB proteins can stabilize MTs, increase MT dynamics, and suppress MT pauses. These activities of EB proteins are important for mitotic spindle formatin and chromsome alignment during mitosis, and may have important roles in the centrosome and cilia assembly.
References	Gouveia, S.M. & Akhmanova, A. (2010) Int Rev Cell Mol Biol. 285:1. Komarova, Y. et al. (2005) Mol Biol Cell. 16(11):5334.

NCBI AND UNIPROT INFORMATION

NCBI GI #	39930509
NCBI GeneID	100732
NCBI Accession #	NP_579928.1
NCBI GenBank Nucleotide #	NM_133350.1
UniProt Accession #	Q6PER3; Q61167
Molecular Weight	31,966 Da
NCBI Official Full Name	microtubule-associated protein RP/EB family member 3
NCBI Official Synonym Full Names	microtubule-associated protein, RP/EB family, member 3
NCBI Official Symbol	Mapre3
NCBI Official Synonym Symbols	EB2; EB3; AI790651
NCBI Protein Information	microtubule-associated protein RP/EB family member 3; RP3; EBF3; end-binding protein 3; EB1 protein family member 3
UniProt Protein Name	Microtubule-associated protein RP/EB family member 3
UniProt Gene Name	Mapre3
UniProt Synonym Gene Names	EBF3; EB3
UniProt Entry Name	MARE3_MOUSE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.