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Anti-EB3 (Ser-176), Phosphospecific Antibody

Catalog # AN1759

Product Information

Application	WB
Primary Accession	Q9UPY8
Host	Rabbit
Clonality	Rabbit Polyclonal
Isotype	IgG
Calculated MW	31982

Additional Information

Gene ID	22924
Other Names	Microtubule RP/EB, MAPRE3, APC, EB3, End-binding. RP3
Target/Specificity	Microtubles (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 End-Binding (EB) family of +TIPs includes EB1 (MAPRE1), EB2 (MAPRE2, RP1), and EB3 (MAPRE3, EBF3). EB proteins are ubiquitiously 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. Site specific phosphorylation may regulate EB activity. EB3 Ser-162 phosphorylation destabilizes EB3 dimer and reduces MT growth, while aurora-kinase induced Ser-176 phosphorylation regulates EB3 protein stability during mitosis.
Dilution	WB~~1:1000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Anti-EB3 (Ser-176), Phosphospecific Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
Shipping	Blue Ice

Background

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family of +TIPs includes EB1 (MAPRE1), EB2 (MAPRE2, RP1), and EB3 (MAPRE3, EBF3). EB proteins are ubiquitiously 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. Site specific phosphorylation may regulate EB activity. EB3 Ser-162 phosphorylation destabilizes EB3 dimer and reduces MT growth, while aurora-kinase induced Ser-176 phosphorylation regulates EB3 protein stability during mitosis.