

Anti-EB3 (Ser-162), Phosphospecific Antibody

Catalog # AN1758

Product Information

ApplicationWBPrimary AccessionQ9UPY8HostRabbit

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-162), Phosphospecific Antibody is for research use only and not

for use in diagnostic or therapeutic procedures.

Shipping Blue Ice

Background

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.