

Anti-EB3 Antibody
Catalog # AN1756**Specification**

Anti-EB3 Antibody - Product Information

Application	WB
Primary Accession	Q9UPY8
Reactivity	Bovine
Host	Rat
Clonality	Rat Monoclonal
Isotype	IgG2a
Calculated MW	31982

Anti-EB3 Antibody - Additional InformationGene ID **22924****Other Names**

Microtubule RP/EB, MAPRE3, APC, EB3, End-binding. RP3

Target/Specificity

The microtubule (MT) plus-end is a crucial site for the regulation of MT dynamics and interactions 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 with organelles and macromolecular complexes. 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 CLIP-associated protein (CLASP) family includes CLASP1 and CLASP2 proteins, which are expressed as long (α) and short (β) isoforms. These +TIPs contain an N-terminal TOG domain, multiple TOG-like domains, and a basic and serine-rich motif (SxIP). The TOG domain facilitates interaction with tubulin dimers, while the SxIP motif promotes interaction with EB1 and MTs. A C-terminal domain is involved in interaction with CLIPs, as well as several other proteins. CLASPs are MT stabilizing factors that localize to mitotic spindles, kinetochores, and the midbody. CLASPs are important for cell division, and may regulate cell migration and neuronal growth cone motility.

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 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping

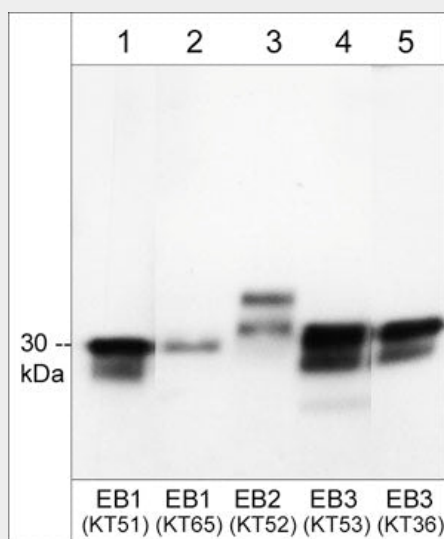
Blue Ice

Anti-EB3 Antibody - Protocols

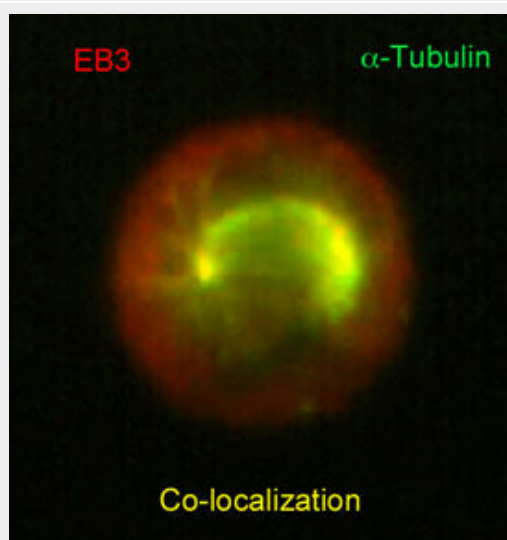
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-EB3 Antibody - Images



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).



Immunocytochemical labeling of EB3 in paraformaldehyde-fixed and NP40-permeabilized A431 cells. The cells were dual labeled with mouse monoclonal anti- α -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).

Anti-EB3 Antibody - Background

The microtubule (MT) plus-end is a crucial site for the regulation of MT dynamics and interactions 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 with organelles and macromolecular complexes. 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 CLIP-associated protein (CLASP) family includes CLASP1 and CLASP2 proteins, which are expressed as long (α) and short (β) isoforms. These +TIPs contain an N-terminal TOG domain, multiple TOG-like domains, and a basic and serine-rich motif (SxIP). The TOG domain facilitates interaction with tubulin dimers, while the SxIP motif promotes interaction with EB1 and MTs. A C-terminal domain is involved in interaction with CLIPs, as well as several other proteins. CLASPs are MT stabilizing factors that localize to mitotic spindles, kinetochores, and the midbody. CLASPs are important for cell division, and may regulate cell migration and neuronal growth cone motility.