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## CLIP1/CLIP170 Antibody

**For Research Use Only. Not for Use in Diagnostic Procedures.**

<b>Applications:</b> W	<b>Reactivity:</b> H M Mk	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 170	<b>Source/Isotype:</b> Rabbit	<b>UniProt ID:</b> #P30622	<b>Entrez-Gene Id:</b> 6249
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### Product Usage Information

#### Application

Western Blotting

#### Dilution

1:1000

### Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

### Specificity/Sensitivity

CLIP1/CLIP170 Antibody recognizes endogenous levels of total CLIP1/CLIP170 protein.

### Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy terminus of human CLIP1/CLIP170 protein. Antibodies are purified by protein A and peptide affinity chromatography.

### Background

Microtubules (MTs) are polarized filaments composed of  $\alpha/\beta$  tubulin heterodimers. The slower growing (minus) ends of MTs are located at centrosomes, and the faster growing (plus) ends extend into the cell periphery. Regulation of MT dynamics is important for multiple cellular functions, including cell division, migration, adhesion, membrane trafficking, and polarity (reviewed in 1).

Cytoplasmic linker protein 1/170 (CLIP1/CLIP170) localizes to the plus ends of MTs (2), and binds to the Rac1/cdc42 effector protein IQGAP1. This complex is involved in establishing cell polarity (3).

CLIP1/CLIP170 also facilitates MT-dependent organelle transport (4), and phosphorylation of CLIP1/CLIP170 by PLK1 and CK2 is required for efficient microtubule-kinetochore attachments in mitosis (5).

### Background References

1. Wiese, C. and Zheng, Y. (2006) *J Cell Sci* 119, 4143-53.
2. Perez, F. et al. (1999) *Cell* 96, 517-27.
3. Fukata, M. et al. (2002) *Cell* 109, 873-85.
4. Lomakin, A.J. et al. (2011) *Mol Biol Cell* 22, 4029-37.
5. Li, H. et al. (2010) *EMBO J* 29, 2953-65.

### Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

### Western Blot Buffer

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

### Applications Key

**W:** Western Blotting

### Cross-Reactivity Key

**H:** Human **M:** Mouse **Mk:** Monkey

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