

### **CLIP170 Antibody**

Catalog # ASC10717

# Specification

### **CLIP170 Antibody - Product Information**

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype
Application Notes

WB, IF P30622

NP\_002947, 4506751 Human, Mouse, Rat

Rabbit Polyclonal

IgG

CLIP170 antibody can be used for detection of CLIP170 by Western blot at

0.5 - 1  $\mu$ g/mL. Antibody can also be used for immunoflourescence starting at 20  $\mu$ g/mL. For immunofluorescence start at 20

μg/mL.

#### **CLIP170 Antibody - Additional Information**

Gene ID **6249** 

Target/Specificity CLIP1:

#### **Reconstitution & Storage**

CLIP170 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

### **Precautions**

CLIP170 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# **CLIP170 Antibody - Protein Information**

Name CLIP1

Synonyms CYLN1, RSN

#### **Function**

Binds to the plus end of microtubules and regulates the dynamics of the microtubule cytoskeleton. Promotes microtubule growth and microtubule bundling. Links cytoplasmic vesicles to microtubules and thereby plays an important role in intracellular vesicle trafficking. Plays a role macropinocytosis and endosome trafficking.

### **Cellular Location**

Cytoplasm. Cytoplasm, cytoskeleton. Cytoplasmic vesicle membrane; Peripheral membrane protein; Cytoplasmic side. Cell projection, ruffle. Note=Localizes to microtubule plus ends





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(PubMed:17889670, PubMed:21646404). Localizes preferentially to the ends of tyrosinated microtubules (By similarity). Accumulates in plasma membrane regions with ruffling and protrusions. Associates with the membranes of intermediate macropinocytic vesicles (PubMed:12433698) {ECO:0000250|UniProtKB:Q922|3, ECO:0000269|PubMed:12433698, ECO:0000269|PubMed:17889670, ECO:0000269|PubMed:21646404}

#### **Tissue Location**

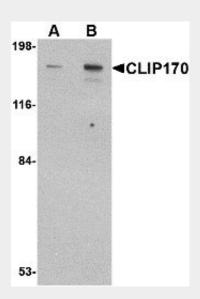
Detected in dendritic cells (at protein level). Highly expressed in the Reed-Sternberg cells of Hodgkin disease

# **CLIP170 Antibody - Protocols**

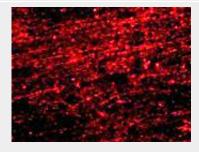
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# CLIP170 Antibody - Images

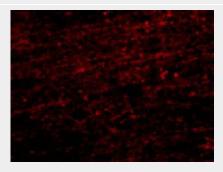


Western blot analysis of CLIP170 in rat brain tissue lysate with CLIP170 antibody at (A) 0.5 and (B)  $1 \mu g/mL$ .





Immunofuorescence of CLIP170 in human brain tissue with CLIP170 antibody at 20 µg/mL.



Immunofluorescence of CLIP170 in Human Brain cells with CLIP170 antibody at 20 μg/mL.

# **CLIP170 Antibody - Background**

CLIP170 Antibody: CLIP170 was initially identified as a new type of intermediate filament associated protein that is highly expressed in Reed-Sternberg cells, the tumoral cells diagnostic for Hodgkin's disease. Later experiments showed that it is located at microtubule plus ends and is required for the binding of endocytic carrier vesicles. CLIP170 has also been suggested to act with LIS1, a protein implicated in brain development, to regulate dynein/dynactin binding microtubules. Other studies suggest that CLIP170 can influence the formation of lamellipodia and cell invasion by invasive breast cancer cells by regulating the release of kinesin and IQGAP1 from a complex of those proteins, CLIP170 and Rac1. At least two isoforms of CLIP170 are known to exist.

### **CLIP170 Antibody - References**

Bilbe G, Delabie J, Bruggen J, et al. Restin: a novel intermediate filament-associated protein highly expressed in the Reed-Sternberg cells of Hodgkin's disease. EMBO J.1992; 11:2103-13. Diamantopoulos GS, Perez F, Goodson HV, et al. Dynamic localization of CLIP-170 to microtubule plus ends is coupled to microtubule assembly. J. Cell Biol.1999; 144:99-112. Pierre P, Scheel J, Richard JE, et al. CLIP-170 links endocytic vesicles to microtubules. Cell70:887-900.

Suzuki K and Takahashi K. Regulation of lamellipodia formation and cell invasion by CLIP-170 in invasive human breast cancer cells. Biochem. Biophys. Res. Commun.2008; 368:199-204.