

# CLIP-170 (C-18): sc-12802

## BACKGROUND

Cytoplasmic linker protein (CLIP-170) is the original member of a group of microtubule binding proteins designated as plus-end-binding proteins (+TIPs). CLIP-170 binds to the growing plus ends of microtubules and acts as a linker between the dynamic microtubule ends and organelle membranes. The protein acts as an anticatastrophic factor, promoting microtubule rescue near the cell periphery. Fluorescently labeled CLIP-170 can be visualized as a comet like streak around the growing ends of microtubules. CLIP-170 co-localizes with Dynactin and Dynein at microtubule ends and also at the kinetochore. Restin, first identified as a marker for Hodgkin and Reed-Sternberg (HRS) cells, is a splice variant of the gene that includes a 35 amino acid stretch not present in CLIP-170. CLIP-170/restin is highly expressed in HRS cells, monocyte-derived dendritic cells, IL-4 + CD40L activated B cells and Ki-1 lymphoma.

## REFERENCES

1. Pierre, P., et al. 1992. CLIP-170 links endocytic vesicles to microtubules. *Cell* 70: 887-900.
2. Delabie, J., et. al. 1993. Restin in Hodgkin's disease and anaplastic large cell lymphoma. *Leuk. Lymphoma* 12: 21-26.
3. Perez, F., et. al. 1999. CLIP-170 highlights growing microtubule ends *in vivo*. *Cell* 96: 517-527.
4. Sahin, U., et. al. 2002. Hodgkin and Reed-Sternberg cell-associated auto-antigen CLIP-170/restin is a marker for dendritic cells and is involved in the trafficking of macropinosomes to the cytoskeleton, supporting a function-based concept of Hodgkin and Reed-Sternberg cells. *Blood* 100: 4139-4145.
5. Komarova, Y.A., et. al. 2002. Cytoplasmic linker proteins promote microtubule rescue *in vivo*. *J. Cell Biol.* 159: 589-599.
6. Goodson, H.V., et. al. 2003. CLIP-170 interacts with dynactin complex and the APC-binding protein EB1 by different mechanisms. *Cell Motil. Cytoskeleton* 55: 156-173.

## CHROMOSOMAL LOCATION

Genetic locus: RSN (human) mapping to 12q24.31; Rsn (mouse) mapping to 5 F.

## SOURCE

CLIP-170 (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of CLIP-170 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-12802 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

CLIP-170 (C-18) is recommended for detection of CLIP-170 and restin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

CLIP-170 (C-18) is also recommended for detection of CLIP-170 and restin in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for CLIP-170 siRNA (h): sc-43281, CLIP-170 siRNA (m): sc-43282, CLIP-170 shRNA Plasmid (h): sc-43281-SH, CLIP-170 shRNA Plasmid (m): sc-43282-SH, CLIP-170 shRNA (h) Lentiviral Particles: sc-43281-V and CLIP-170 shRNA (m) Lentiviral Particles: sc-43282-V.

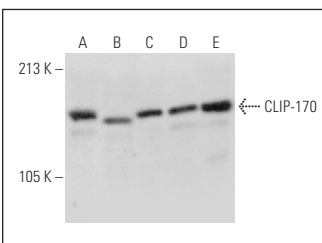
Molecular Weight of CLIP-170: 170 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206, HeLa whole cell lysate: sc-2200 or A549 cell lysate: sc-2413.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



CLIP-170 (C-18): sc-12802. Western blot analysis of CLIP-170 expression in HeLa (A), HEK293 (B), A549 (C), HUV-EC-C (D) and MCF7 (E) whole cell lysates.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.



Try **CLIP-170 (F-3): sc-28325** or **CLIP-170 (E-8): sc-166801**, our highly recommended monoclonal alternatives to CLIP-170 (C-18). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **CLIP-170 (F-3): sc-28325**.