

CLIP-170 (E-5): sc-48411

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 autoantigen 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.

CHROMOSOMAL LOCATION

Genetic locus: CLIP1 (human) mapping to 12q24.31; Clip1 (mouse) mapping to 5 F.

SOURCE

CLIP-170 (E-5) is a mouse monoclonal antibody raised against amino acids 1128-1427 of CLIP-170 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

APPLICATIONS

CLIP-170 (E-5) is recommended for detection of CLIP-170 and restin of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

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.

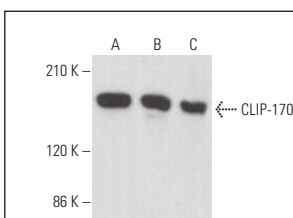
Molecular Weight of CLIP-170: 170 kDa.

Positive Controls: KNRK whole cell lysate: sc-2214, HeLa whole cell lysate: sc-2200 or A549 cell lysate: sc-2413.

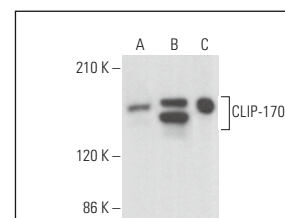
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



CLIP-170 (E-5): sc-48411. Western blot analysis of CLIP-170 expression in HeLa (A), HUV-EC-C (B) and RAW 264.7 (C) whole cell lysates.



CLIP-170 (E-5): sc-48411. Western blot analysis of CLIP-170 expression in KNRK (A), A549 (B) and MCF7 (C) whole cell lysates.

RESEARCH USE

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



See **CLIP-170 (F-3): sc-28325** for CLIP-170 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.