

CLIP-170 (H-300): sc-25613

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.

CHROMOSOMAL LOCATION

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

SOURCE

CLIP-170 (H-300) is a rabbit polyclonal antibody raised against amino acids 1128-1427 mapping at 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.

APPLICATIONS

CLIP-170 (H-300) 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 (H-300) is also recommended for detection of CLIP-170 and restin in additional species, including 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.

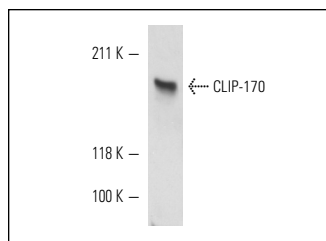
Molecular Weight of CLIP-170: 170 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, mouse lung extract: sc-2390 or KNRK whole cell lysate: sc-2214.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



CLIP-170 (H-300): sc-25613. Western blot analysis of CLIP-170 expression in T2.DR3 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Green, R.A., et al. 2005. APC and EB1 function together in mitosis to regulate spindle dynamics and chromosome alignment. *Mol. Biol. Cell* 16: 4609-4622.
2. Yang, X., et al. 2009. Cdc2-mediated phosphorylation of CLIP-170 is essential for its inhibition of centrosome reduplication. *J. Biol. Chem.* 284: 28775-28782.
3. Sumigray, K.D., et al. 2011. Lis1 is essential for cortical microtubule organization and desmosome stability in the epidermis. *J. Cell Biol.* 194: 631-642.
4. Liu, C., et al. 2015. A dynein independent role of Tctex-1 at the kinetochore. *Cell Cycle* 14: 1379-1388.

STORAGE

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

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 (H-300). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **CLIP-170 (F-3): sc-28325**.