SANTA CRUZ BIOTECHNOLOGY, INC.

CLIP-170 (F-17): sc-12801

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Cytoplasmic linker protein (CLIP-170) is the original member of a group of microtuble 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 (F-17) 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-12801 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.

PROTOCOLS

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

APPLICATIONS

CLIP-170 (F-17) 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).

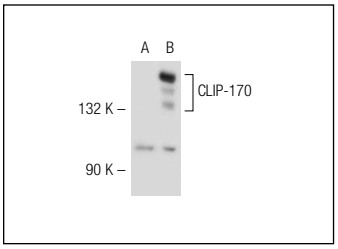
CLIP-170 (F-17) is also recommended for detection of CLIP-170 and restin in additional species, including equine, canine, bovine, porcine and avian.

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.

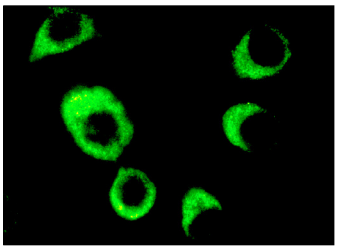
Molecular Weight of CLIP-170: 170 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, HeLa whole cell lysate: sc-2200 or CLIP-170 (m): 293T Lysate: sc-119308.

DATA



CLIP-170 (F-17): sc-12801. Western blot analysis of CLIP-170 expression in non-transfected: sc-117752 (**A**) and mouse CLIP-170 transfected: sc-119308 (**B**) 293T whole cell lysates.



CLIP-170 (F-17): sc-12801. Immunofluorescence staining of methanol-fixed KNRK cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

1. Arudchelvan, Y., et al. 2003. Identification and characterization of major histocompatibility complex class II compartments in cortical thymic epithelial cells. Anat. Rec. A Discov. Mol. Cell. Evol. Biol. 274: 798-806.

RESEARCH USE

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