

CLIP 170

Cat.No. 239 003; Polyclonal rabbit antibody, 50 µg specific antibody (lyophilized)

Data Sheet

Reconstitution/ Storage	50 µg specific antibody, lyophilized. Affinity purified with the immunogen. Rabbit serum albumin was added for stabilization. For reconstitution add 50 µl H ₂ O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	WB: 1 : 1000 (AP staining) IP: not tested yet ICC: 1 : 200 up to 1 : 500 (see remarks) IHC: not tested yet IHC-P/FFPE: not tested yet
Immunogen	Recombinant protein corresponding to AA 1283 to 1438 from human CLIP170 (UniProt Id: P30622)
Reactivity	Reacts with: human (P30622), rat (Q9JK25), mouse (Q922J3). Other species not tested yet.
Specificity	Recognizes CLIP 170 and restin.
Remarks	ICC: Fix 15 min at -20°C with ice-cold MeOH / 1mM EGTA, then transfer without washing to 4% PFA (in PBS) and fix for 20 min at RT.

TO BE USED IN VITRO / FOR RESEARCH ONLY

NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

Cytoplasmic linker proteins (CLIPs) are members of the plus-end-binding protein family (+TIPs) that interact with the growing plus ends of microtubules. They modulate microtubule dynamics and are proposed to link this cytoskeletal network to other intracellular structures.

CLIP 170 has been shown to colocalize with dynactin and dynein at microtubule ends and also at the kinetochore. High levels of a splice variant named **restin** are found in Hodgkin and Reed-Sternberg (HRS) cells, monocyte-derived dendritic cells (DCs) and interleukin-4 (IL-4) CD40L-activated B cells. Restin carries a 35 amino acids long insertion in the center of the molecule.

Selected General References

Probing interactions between CLIP-170, EB1, and microtubules.
Gupta KK, Joyce MV, Slabbekoorn AR, Zhu ZC, Paulson BA, Boggess B, Goodson HV
Journal of molecular biology (2010) 395(5): 1049-62.

CLIP-170 facilitates the formation of kinetochore-microtubule attachments.
Tanenbaum ME, Galjart N, van Vugt MA, Medema RH
The EMBO journal (2006) 25(1): 45-57.

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.
Sahin U, Neumann F, Tureci O, Schmits R, Perez F, Pfreundschuh M
Blood (2002) 100(12): 4139-45.

Dynamic localization of CLIP-170 to microtubule plus ends is coupled to microtubule assembly.
Diamantopoulos GS, Perez F, Goodson HV, Batelier G, Melki R, Kreis TE, Rickard JE
The Journal of cell biology (1999) 144(1): 99-112.

Identification and expression of two novel CLIP-170/Restin isoforms expressed predominantly in muscle.
Griparic L, Keller TC
Biochimica et biophysica acta (1998) 1405(1-3): 35-46.

Restin: a novel intermediate filament-associated protein highly expressed in the Reed-Sternberg cells of Hodgkin's disease.
Bilbe G, Delabie J, Brügger J, Richener H, Asselbergs FA, Cerletti N, Sorg C, Odink K, Tarcsay L, Wiesendanger W
The EMBO journal (1992) 11(6): 2103-13.

CLIP-170 links endocytic vesicles to microtubules.
Pierre P, Scheel J, Rickard JE, Kreis TE
Cell (1992) 70(6): 887-900.