

CLIP3 (S-14): sc-161017

BACKGROUND

CLIP3 (CAP-GLY domain containing linker protein 3), also known as RSNL1 or CLIPR-59, is a 547 amino acid cytoplasmic protein that localizes to Golgi stacks as well as tubulovesicular elements juxtaposed to Golgi cisternae. Composed of three ANK repeats and two CAP-Gly domains, CLIP3 may function as a cytoplasmic linker protein that is involved in TGN-endosome dynamics. CLIP3 acts as a scaffold protein by modulating Akt cellular compartmentalization and phosphorylation of Akt substrates in adipocytes, suggesting a role in the regulation of adipocyte glucose transport. Belonging to the CLIP-170 family of cytoplasmic linker proteins, CLIP3 also functions as a chaperone, allowing immediate interaction between tubulin and the raft component GD3, during cell apoptosis triggered by FAS. CLIP3 is encoded by a gene located on human chromosome 19, which consists of over 63 million bases, houses approximately 1,400 genes and is recognized for having the greatest gene density of the human chromosomes.

REFERENCES

1. Perez, F., Pernet-Gallay, K., Nizak, C., Goodson, H.V., Kreis, T.E. and Goud, B. 2002. CLIPR-59, a new trans-Golgi/TGN cytoplasmic linker protein belonging to the CLIP-170 family. *J. Cell Biol.* 156: 631-642.
2. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 607382. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
3. Lallemand-Breitenbach, V., Quesnoit, M., Braun, V., El Marjou, A., Poüs, C., Goud, B. and Perez, F. 2004. CLIPR-59 is a lipid raft-associated protein containing a cytoskeleton-associated protein glycine-rich domain (CAP-Gly) that perturbs microtubule dynamics. *J. Biol. Chem.* 279: 41168-41178.
4. Steinmetz, M.O. and Akhmanova, A. 2008. Capturing protein tails by CAP-Gly domains. *Trends Biochem. Sci.* 33: 535-545.
5. Ding, J. and Du, K. 2009. ClipR-59 interacts with Akt and regulates Akt cellular compartmentalization. *Mol. Cell. Biol.* 29: 1459-1471.
6. Gonzalez, E. and McGraw, T.E. 2009. Insulin-modulated Akt subcellular localization determines Akt isoform-specific signaling. *Proc. Natl. Acad. Sci. USA* 106: 7004-7009.
7. Sorice, M., Matarrese, P., Manganelli, V., Tinari, A., Giammaroli, A.M., Mattei, V., Misasi, R., Garofalo, T. and Malorni, W. 2010. Role of GD3-CLIPR-59 association in lymphoblastoid T cell apoptosis triggered by CD95/FAS. *PLoS ONE* 5: e8567.

CHROMOSOMAL LOCATION

Genetic locus: CLIP3 (human) mapping to 19q13.12; Clip3 (mouse) mapping to 7 B1.

SOURCE

CLIP3 (S-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of CLIP3 of human origin.

RESEARCH USE

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

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-161017 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CLIP3 (S-14) is recommended for detection of CLIP3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with other CLIP family members.

Suitable for use as control antibody for CLIP3 siRNA (h): sc-97205, CLIP3 siRNA (m): sc-142392, CLIP3 shRNA Plasmid (h): sc-97205-SH, CLIP3 shRNA Plasmid (m): sc-142392-SH, CLIP3 shRNA (h) Lentiviral Particles: sc-97205-V and CLIP3 shRNA (m) Lentiviral Particles: sc-142392-V.

Molecular Weight of CLIP3: 60 kDa.

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) 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.

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.