

p150 (F-7): sc-518227

BACKGROUND

Accurate sorting and delivery of proteins to the proper organelles is essential for normal cellular functioning. The yeast Vps proteins are involved in sorting and delivering vacuolar proteins from the Golgi network, where they undergo posttranslational modification, to the vacuole. Vps34p, a key component of this protein trafficking system, shares homology with proteins in the PI 3-kinase family and is regulated by Vps15p. Vps15p is thought to recruit Vps34p to the membrane of the Golgi complex and to enhance Vps34p kinase activity. p150 is the human homolog of the yeast Vps15p and is ubiquitously expressed. p150, like Vps15p, is subject to posttranslational modification, including myristylation.

REFERENCES

1. Rothman, J.H., et al. 1989. Protein targeting to the yeast vacuole. *Trends Biochem. Sci.* 14: 347-350.
2. Stack, J.H. and Emr, S.D. 1994. Vps34p required for yeast vacuolar protein sorting is a multiple specificity kinase that exhibits both protein kinase and phosphatidylinositol-specific PI 3-kinase activities. *J. Biol. Chem.* 269: 31552-31562.
3. Stack, J.H., et al. 1995. Receptor-mediated protein sorting to the vacuole in yeast: roles for a protein kinase, a lipid kinase and GTP-binding proteins. *Annu. Rev. Cell Dev. Biol.* 11: 1-33.
4. Stack, J.H., et al. 1995. Vesicle-mediated protein transport: regulatory interactions between the Vps15 protein kinase and the Vps34 PtdIns 3-kinase essential for protein sorting to the vacuole in yeast. *J. Cell Biol.* 129: 321-334.
5. Volinia, S., et al. 1995. A human phosphatidylinositol 3-kinase complex related to the yeast Vps34p-Vps15p protein sorting system. *EMBO J.* 14: 3339-3348.

CHROMOSOMAL LOCATION

Genetic locus: PIK3R4 (human) mapping to 3q22.1.

SOURCE

p150 (F-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 840-862 of p150 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

p150 (F-7) is available conjugated to agarose (sc-518227 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-518227 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-518227 PE), fluorescein (sc-518227 FITC), Alexa Fluor® 488 (sc-518227 AF488), Alexa Fluor® 546 (sc-518227 AF546), Alexa Fluor® 594 (sc-518227 AF594) or Alexa Fluor® 647 (sc-518227 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-518227 AF680) or Alexa Fluor® 790 (sc-518227 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

p150 (F-7) is recommended for detection of p150 of 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 p150 siRNA (h): sc-43986, p150 shRNA Plasmid (h): sc-43986-SH and p150 shRNA (h) Lentiviral Particles: sc-43986-V.

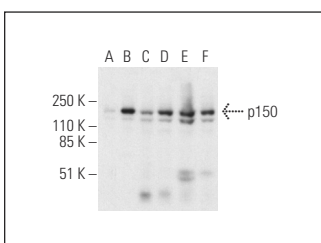
Molecular Weight of p150: 150 kDa.

Positive Controls: p150 (h): 293T Lysate: sc-111979, HeLa whole cell lysate: sc-2200 or K-562 whole cell lysate: sc-2203.

RECOMMENDED SECONDARY 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



p150 (F-7): sc-518227. Western blot analysis of p150 expression in non-transfected 293T: sc-117752 (A), human p150 transfected 293T: sc-111979 (B), HeLa (C), Raji (D), K-562 (E) and MOLT-4 (F) whole cell lysates. Detection reagent used: m-IgG₁ BP-HRP: sc-525408.

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.

PROTOCOLS

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