

# p150 (JK-13): sc-100798

## 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 myristalation.

## REFERENCES

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- 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.
- Stack, J.H., Horzodovsky, B. and Emr, S.D. 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.
- Stack, J.H., DeWald, D.B., Takegawa, K. and Emr, S.D. 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.
- Volinia, S., Dhand, R., Vanhaesebroeck, B., MacDougall, L.K., Stein, R., Zvelebil, M.J., Domin, J., Panaretou, C. and Waterfield, M.D. 1995. A human phosphatidylinositol 3-kinase complex related to the yeast Vps34p-Vps15p protein sorting system. *EMBO J.* 14: 3339-3348.
- Panaretou, C., Domin, J., Cockcroft, S. and Waterfield, M.D. 1997. Characterization of p150, an adaptor protein for the human phosphatidylinositol (PtdIns) 3-kinase. Substrate presentation by phosphatidylinositol transfer protein to the p150. Ptdins 3-kinase complex. *J. Biol. Chem.* 272: 2477-2485.

## CHROMOSOMAL LOCATION

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

## SOURCE

p150 (JK-13) is a mouse monoclonal antibody raised against recombinant p150 of human origin.

## PRODUCT

Each vial contains 100 µg IgG<sub>2a</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## STORAGE

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

## APPLICATIONS

p150 (JK-13) is recommended for detection of p150 of 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)] 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.

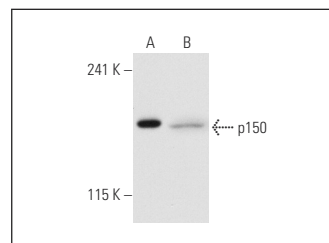
Molecular Weight of p150: 150 kDa.

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

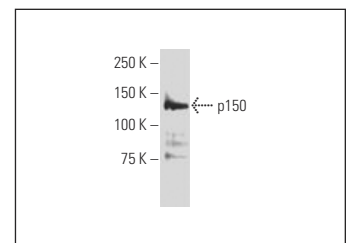
## RECOMMENDED SUPPORT REAGENTS

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).

## DATA



p150 (JK-13): sc-100798. Western blot analysis of p150 expression in non-transfected: sc-117752 (A) and human p150 transfected: sc-111979 (B) 293T whole cell lysates.



p150 (JK-13): sc-100798. Western blot analysis of p150 expression in HeLa whole cell lysate.

## SELECT PRODUCT CITATIONS

- Zhou, C., Qian, X., Hu, M., Zhang, R., Liu, N., Huang, Y., Yang, J., Zhang, J., Bai, H., Yang, Y., Wang, Y., Ali, D., Michalak, M., Chen, X.Z. and Tang, J. 2019. STYK1 promotes autophagy through enhancing the assembly of autophagy-specific class III phosphatidylinositol 3-kinase complex I. *Autophagy*. E-published.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.