

# HIP2 (Q-16): sc-50736

## BACKGROUND

HIP1 (Huntingtin interacting protein 1), a membrane-associated protein, and HIP2 bind specifically to the N-terminus of human Huntingtin. HIP1 and HIP2 are ubiquitously expressed in different brain regions at low levels and exhibit nearly identical subcellular fractionation as Huntingtin. The Huntingtin-HIP1 interaction is inversely correlated to the polyglutamine length in Huntingtin, suggesting that loss of normal Huntingtin-HIP1 interaction may compromise the membrane-cytoskeletal integrity in the brain. Conversely, the Huntingtin-HIP2 interaction is not affected by the polyglutamine length in the Huntingtin protein. However, both HIP1 and HIP2 play an important role in the pathogenesis of Huntington disease (HD).

## REFERENCES

1. Sun, H., et al. 1992. Effects of McAbs HIP2, APT4 and HI117 on the human platelet cytoskeleton. *Zhongguo Yi Xue Ke Xue Yuan Xue Bao* 14: 1-5.
2. Kalchman, M.A., et al. 1996. Huntingtin is ubiquitinated and interacts with a specific ubiquitin-conjugating enzyme. *J. Biol. Chem.* 271: 19385-19394.
3. Tanno, Y., et al. 1999. Localization of Huntingtin-interacting protein-2 (HIP2) mRNA in the developing mouse brain. *J. Chem. Neuroanat.* 17: 99-107.
4. Wang, Y., et al. 2000. YAC/BAC-based physical and transcript mapping around the gracile axonal dystrophy (gad) locus identifies Uchl1, Pmx2b, ATP3A2, and HIP2 genes. *Genomics* 66: 333-336.
5. Lee, S.J., et al. 2001. E3 ligase activity of RING finger proteins that interact with HIP2, a human ubiquitin-conjugating enzyme. *FEBS Lett.* 503: 61-64.
6. Song, S., et al. 2003. Essential role of E2-25K/HIP2 in mediating Amyloid- $\beta$  neurotoxicity. *Mol. Cell* 12: 553-563.
7. Wesierska-Gadek, J., et al. 2007. Roscovitine-activated HIP2 kinase induces phosphorylation of wildtype p53 at Ser 46 in human MCF7 breast cancer cells. *J. Cell. Biochem.* 100: 865-874.

## CHROMOSOMAL LOCATION

Genetic locus: HIP2 (human) mapping to 4p14; Hip2 (mouse) mapping to 5 C3.1.

## SOURCE

HIP2 (Q-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of HIP2 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-50736 P, (100  $\mu$ g 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.

## APPLICATIONS

HIP2 (Q-16) is recommended for detection of HIP2 isoforms 1 and 2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

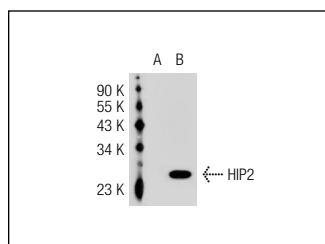
HIP2 (Q-16) is also recommended for detection of HIP2 isoforms 1 and 2 in additional species, including canine, bovine, porcine and avian.

Suitable for use as control antibody for HIP2 siRNA (h): sc-41984, HIP2 siRNA (m): sc-41985, HIP2 shRNA Plasmid (h): sc-41984-SH, HIP2 shRNA Plasmid (m): sc-41985-SH, HIP2 shRNA (h) Lentiviral Particles: sc-41984-V and HIP2 shRNA (m) Lentiviral Particles: sc-41985-V.

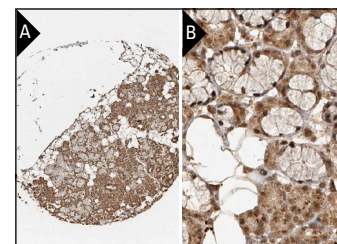
Molecular Weight of HIP2: 22 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or HIP2 (h): 293T Lysate: sc-116355.

## DATA



HIP2 (Q-16): sc-50736. Western blot analysis of HIP2 expression in non-transfected: sc-117752 (A) and human HIP2 transfected: sc-116355 (B) 293T whole cell lysates.



HIP2 (Q-16): sc-50736. Immunoperoxidase staining of formalin fixed, paraffin-embedded human salivary gland tissue showing nuclear and cytoplasmic staining of glandular cells in low (A) and high (B) resolution. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

## 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) or our catalog for detailed protocols and support products.

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Try **HIP2 (H-6): sc-390339** or **HIP2 (C-5): sc-390138**, our highly recommended monoclonal alternatives to HIP2 (Q-16).