SANTA CRUZ BIOTECHNOLOGY, INC.

HIP2 (C-5): sc-390138

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The Power to Question

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

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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.
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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.
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9. Ybe, J.A., et al. 2007. Crystal structure at 2.8 A of the DLLRKN-containing coiled-coil domain of Huntingtin-interacting protein 1 (HIP1) reveals a surface suitable for Clathrin light chain binding. J. Mol. Biol. 367: 8-15.

CHROMOSOMAL LOCATION

Genetic locus: UBE2K (human) mapping to 4p14; Ube2k (mouse) mapping to 5 C3.1.

SOURCE

HIP2 (C-5) is a mouse monoclonal antibody raised against amino acids 1-100 mapping at the N-terminus of HIP2 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

HIP2 (C-5) is recommended for detection of HIP2 of mouse, rat and 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).

HIP2 (C-5) is also recommended for detection of HIP2 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.

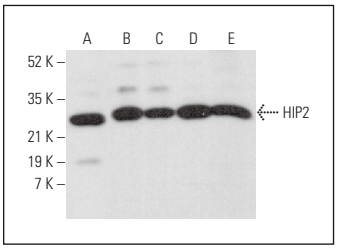
Molecular Weight of HIP2: 22 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, NAMALWA cell lysate: sc-2234 or WEHI-231 whole cell lysate: sc-2213.

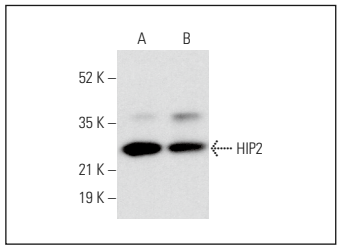
RECOMMENDED SUPPORT REAGENTS

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). 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



HIP2 (C-5): sc-390138. Western blot analysis of HIP2 expression in Jurkat (**A**), RAW 264.7 (**B**), WEHI-231 (**C**) and MM-142 (**D**) whole cell lysates and rat spleen tissue extract (**E**).



HIP2 (C-5): sc-390138. Western blot analysis of HIP2 expression in NAMALWA (**A**) and BJAB (**B**) whole cell lysates.

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.