

Hippi (Q-20): sc-21997

BACKGROUND

Programmed neuronal cell death is a feature of neurodegenerative disorders such as Alzheimer's and Huntington's disease, which occur later in human life. Huntington's disease at the molecular and cell level is characterized by polyglutamine expansion of the protein huntingtin (Htt) that leads to apoptotic-mediated neurodegenerative loss of medium spiny neurons throughout the striatum. Polyglutamine expansion reduces the level of association between Hip-1 and Htt, thereby increasing levels of free Hip-1 that then can be the candidate protein Hippi (Hip-1 protein interactor). The Hippi-Hip-1 heterodimer is a pro-apoptotic complex that recruits procaspase-8 and initiates caspase-8 activation, which may contribute to the neuronal cell death observed in individuals diagnosed with Huntington's disease. The human hippi gene maps to chromosome 3q13.13 and encodes a 429 amino acid protein.

REFERENCES

1. Wanker, E.E. 2002. Hip1 and Hippi participate in a novel cell death-signaling pathway. *Dev. Cell.* 2: 126-128.
2. Gervais, F.G., Singaraja, R., Xanthoudakis, S., Gutekunst, C.A., Leavitt, B.R., Metzler, M., Hackam, A.S., Tam, J., Vaillancourt, J.P., Houtzager, V., Rasper, D.M., Roy, S., Hayden, M.R. and Nicholson, D.W. 2002. Recruitment and activation of caspase-8 by the Huntingtin-interacting protein Hip-1 and a novel partner Hippi. *Nat. Cell. Biol.* 4: 95-105.
3. Ferrier, V. 2002. Hip, hip, hippi! *Nat. Cell. Biol.* 4: E30.
4. MacFarlane, M. 2002. HIPPI-HIP1-a deadly duo. *Trends Pharmacol. Sci.* 23: 210.
5. Mattson, M.P. 2002. Accomplices to neuronal death. *Nature* 415: 377-379.
6. Online Mendelian Inheritance in Man, OMIM (™). Johns Hopkins University, Baltimore, MD. MIM Number: 606621: 02/05/2002. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
7. LocusLink Report (LocusID: 55081), <http://www.ncbi.nlm.nih.gov/LocusLink/>

SOURCE

Hippi (Q-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Hippi of human origin.

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-21997 P, (100 µg 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.

PROTOCOLS

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

APPLICATIONS

Hippi (Q-20) is recommended for detection of Hippi of mouse, rat and 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)], 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).

Hippi (Q-20) is also recommended for detection of Hippi in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Hippi siRNA (h): sc-105454, Hippi siRNA (m): sc-145971, Hippi shRNA Plasmid (h): sc-105454-SH, Hippi shRNA Plasmid (m): sc-145971-SH, Hippi shRNA (h) Lentiviral Particles: sc-105454-V and Hippi shRNA (m) Lentiviral Particles: sc-145971-V.

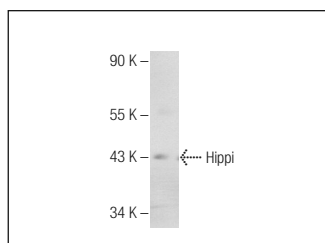
Molecular Weight of Hippi: 49 kDa.

Positive Controls: Hippi (h2): rat cerebellum extract: sc-2398 or mouse brain extract: sc-2253.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



Hippi (Q-20): sc-21997. Western blot analysis of Hippi expression in Jurkat whole cell lysate.

RESEARCH USE

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