

HIP1/12 (E-16): sc-20899

BACKGROUND

Huntington disease is associated with the expansion of a polyglutamine tract, greater than 35 repeats, in the HD gene product, huntingtin. HIP1 (huntingtin interacting protein 1), a membrane-associated protein, binds specifically to the N-terminus of human huntingtin. HIP1 is ubiquitously expressed in different brain regions at low levels and exhibits nearly identical subcellular fractionation as huntingtin. The HIP1 gene locates to the human chromosome 7q11.23. The huntingtin-HIP1 interaction is restricted to the brain and is inversely correlated to the polyglutamine length in the huntingtin, suggesting that loss of normal huntingtin-HIP1 interaction may compromise the membrane-cytoskeletal integrity in the brain. HIP1 contains an endocytic multidomain protein with a C-terminal Actin-binding domain, a central coiled-coil forming region and an N-terminal ENTH domain. HIP1 may be involved in vesicle trafficking; the structural integrity of HIP1 is crucial for maintenance of normal vesicle size *in vivo*. HIP12 is a non-proapoptotic member of the HIP gene family that is expressed in the brain and shares a similar subcellular distribution pattern with HIP1. However, HIP12 differs from HIP1 in its pattern of expression at both the mRNA and protein level. HIP12 does not directly interact with huntingtin but can interact with HIP1.

CHROMOSOMAL LOCATION

Genetic locus: HIP1 (human) mapping to 7q11.23, HIP1R (human) mapping to 12q24.31; Hip1 (mouse) mapping to 5 G2, Hip1r (mouse) mapping to 5 F.

SOURCE

HIP1/12 (E-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of HIP1 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-20899 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HIP1/12 (E-16) is recommended for detection of HIP1 and HIP12 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).

HIP1/12 (E-16) is also recommended for detection of HIP1 and HIP12 in additional species, including equine, canine, bovine, porcine and avian.

Molecular Weight of HIP1: 116 kDa.

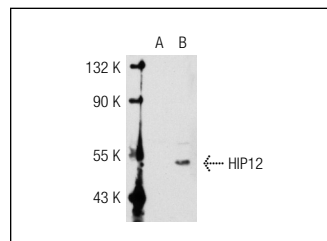
Molecular Weight of HIP12: 119 kDa.

Positive Controls: HIP12 (h): 293T Lysate: sc-115513, T24 cell lysate: sc-2292 or DU 145 cell lysate: sc-2268.

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



HIP1/12 (E-16): sc-20899. Western blot analysis of HIP12 expression in non-transfected: sc-117752 (A) and human HIP12 transfected: sc-115513 (B) 293T 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.

PROTOCOLS

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


 MONOS
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Try **HIP1 (4B10): sc-47754** or **HIP2 (H-6): sc-390339**, our highly recommended monoclonal alternatives to HIP1/12 (E-16).