# SANTA CRUZ BIOTECHNOLOGY, INC.

# HIP1 (H-290): sc-33601



# 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 an N-terminal ENTH domain, a central coiled-coil forming region and a C-terminal Actin-binding domain. HIP may be involved in vesicle trafficking, and 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. HIP12 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; Hip1 (mouse) mapping to 5 G2.

#### SOURCE

HIP1 (H-290) is a rabbit polyclonal antibody raised against amino acids 481-770 mapping within an internal region of HIP1 of human origin.

### PRODUCT

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

# **RESEARCH USE**

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

#### **APPLICATIONS**

HIP1 (H-290) is recommended for detection of HIP1 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), 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).

Suitable for use as control antibody for HIP1 siRNA (h): sc-41982, HIP1 siRNA (m): sc-41983, HIP1 shRNA Plasmid (h): sc-41982-SH, HIP1 shRNA Plasmid (m): sc-41983-SH, HIP1 shRNA (h) Lentiviral Particles: sc-41982-V and HIP1 shRNA (m) Lentiviral Particles: sc-41983-V.

Molecular Weight of HIP1: 116 kDa.

Positive Controls: T24 cell lysate: sc-2292, DU 145 cell lysate: sc-2268 or COLO 320DM cell lysate: sc-2226

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941. 4) Immuno-histochemistry: use ImmunoCruz<sup>™</sup>: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

# DATA





HIP1 (H-290): sc-33601. Western blot analysis of HIP1 expression in T24  $({\rm A})$  and DU 145  $({\rm B})$  whole cell lysates.

HIP1 (H-290): sc-33601. Immunoperoxidase staining of formalin fixed, paraffin-embedded human corpus, uterine tissue showing cytoplasmic staining of cells in endometrial stroma and glandular cells at low (**A**) and high (**B**) magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

# **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.

# MONOS Satisfation Guaranteed

Try **HIP1 (4B10): sc-47754** or **HIP1 (H-6): sc-271341**, our highly recommended monoclonal alternatives to HIP1 (H-290).