SANTA CRUZ BIOTECHNOLOGY, INC.

Huntingtin (H-300): sc-15352



BACKGROUND

Huntingtin is a protein that contains a polyglutamine region. When the number of glutamine repeats exceeds 35, the gene encodes a version of Huntingtin that leads to Huntington's disease (HD). When the polyglutamine stretch is mutated, Huntingtin acts within the nucleus to induce neurodegeneration by a cell-specific apoptotic mechanism. Loss of Huntingtin activity is unlikely to be the cause of HD, and it has been proposed that the expanded glutamine repeat region may induce an abnormal interaction between the mutant protein and other cellular proteins. Huntingtin interacts with a variety of proteins including HAP1, glyceraldehyde phosphate dehydrogenase (GAPDH), and HIP1.

REFERENCES

- 1. The Huntington's Disease Collaborative Research Group. 1993. A novel gene containing a trinucleotide repeat that is expanded and unstabe on Huntington's disease chromosomes. Cell 72: 971-983.
- Ambrose, C.M., et al. 1994. Structure and expression of the Huntington's disease gene: evidence against simple inactivation due to an expanded CAG repeat. Somat. Cell Mol. Genet. 20: 27-38.

CHROMOSOMAL LOCATION

Genetic locus: HTT (human) mapping to 4p16.3; Htt (mouse) mapping to 5 B2.

SOURCE

Huntingtin (H-300) is a rabbit polyclonal antibody raised against amino acids 2845-3144 mapping near the C-terminus of Huntingtin of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Huntingtin (H-300) is recommended for detection of Huntingtin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

Huntingtin (H-300) is also recommended for detection of Huntingtin in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Huntingtin siRNA (h): sc-35617, Huntingtin siRNA (m): sc-35618, Huntingtin shRNA Plasmid (h): sc-35617-SH, Huntingtin shRNA Plasmid (m): sc-35618-SH, Huntingtin shRNA (h) Lentiviral Particles: sc-35617-V and Huntingtin shRNA (m) Lentiviral Particles: sc-35618-V.

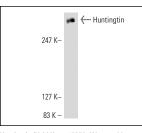
Molecular Weight of Huntingtin: 350 kDa.

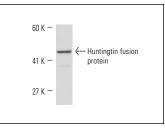
Positive Controls: Jurkat whole cell lysate: sc-2204, mouse brain extract: sc-2253 or rat brain extract: sc-2392.

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[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (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 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[™] Mounting Medium: sc-24941.

DATA





Huntingtin (H-300): sc-15352. Western blot analysis of Huntingtin expression in rat brain tissue extract.

Huntingtin (H-300): sc-15352. Western blot analysis of human recombinant Huntingtin fusion protein.

STORAGE

Store at 4° C, **D0 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 Satisfation Guaranteed

Try Huntingtin (3E10): sc-47757 or Huntingtin (4E10): sc-47758, our highly recommended monoclonal alternatives to Huntingtin (H-300).