HAP1 (D-19): sc-8769



The Power to Question

BACKGROUND

HAP1 (Huntingtin-associated protein 1) binds to Huntingtin. Huntingtin is a protein that contains a polyglutamine region, and when the number of glutamine repeats exceeds 35, the gene encodes a version of Huntingtin that leads to Huntington's disease (HD). The ability of HAP1 to bind to Huntingtin is enhanced by an expanded polyglutamine repeat region. HAP1 shows neuronal localization and moves with Huntingtin in nerve fibers. HAP1 is primarily expressed in brain tissue, with greater expression in the olfactory bulb and brain stem. HAP1 in rat has been shown to associate with a number of intracellular organelles. Mouse HAP1 is localized to membrane-bound organelles including large endosomes, tubulovesicular structures and budding vesicles in neurons.

REFERENCES

- Li, X.J., Li, S.H., Sharp, A.H., Nucifora, F.C. Jr., Schilling, G., Lanahan, A., Worley, P., Snyder, S.H. and Ross, C.A. 1995. A Huntingtin-associated protein enriched in brain with implications for pathology. Nature 378: 398-402.
- Group THDCR. 1993. A novel gene containing a trinucleotide repeat that is expanded and unstable on Huntington's disease chromosomes. Cell 72: 971-983.
- Gusella, J.F., McNeil, S., Persichetti, F., Srinidhi, J., Novelletto, A., Bird, E., Faber, P., Vonsattel, J.-P., Myers, R. and MacDonald, M.E. 1996. Huntington's disease. Cold Spring Harb. Symp. Quant. Biol. 61: 615-626.
- 4. Li, X.-J., Sharp, A.H., Li, S.-H., Dawson, T.M., Snyder, S.H. and Ross, C.A. 1996. Huntingtin-associated protein (HAP1): Discrete neuronal localization in the brain resemble those of neuronal nitric oxide synthase. Proc. Natl. Acad. Sci. USA 93: 4839-4844.
- Block-Galarza, J., Chase, K.O., Sapp, E., Vaughn, K.T., Vallee, R.B., DiFiglia, M. and Aronin, N. 1997. Fast transport and retrograde movement of Huntingtin and HAP 1 in axons. Neuroreport 8: 2247-2251.

CHROMOSOMAL LOCATION

Genetic locus: Hap1 (mouse) mapping to 11 D.

SOURCE

HAP1 (D-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of HAP1 of mouse origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-8769 P, ($100 \mu g$ 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.

APPLICATIONS

HAP1 (D-19) is recommended for detection of HAP1 of mouse origin and HAP1A and HAP1B of rat origin of mouse and rat 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).

Suitable for use as control antibody for HAP1 siRNA (m): sc-63300, HAP1 shRNA Plasmid (m): sc-63300-SH and HAP1 shRNA (m) Lentiviral Particles: sc-63300-V.

Molecular Weight of HAP1A: 75 kDa.

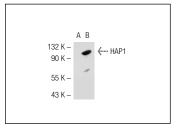
Molecular Weight of HAP1B: 85 kDa.

Positive Controls: HAP1 (m): 293T Lysate: sc-125431.

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



HAP1 (D-19): sc-8769. Western blot analysis of HAP1 expression in non-transfected: sc-117752 (A) and mouse HAP1 transfected: sc-125431 (B) 293T whole cell lysates.

RESEARCH USE

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



Try **HAP1 (C-3):** sc-166245 or **HAP1 (1B6):** sc-32257, our highly recommended monoclonal alternatives to HAP1 (D-19).

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