

HAP1 (C-3): sc-166245

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.

CHROMOSOMAL LOCATION

Genetic locus: HAP1 (human) mapping to 17q21.2; Hap1 (mouse) mapping to 11 D.

SOURCE

HAP1 (C-3) is a mouse monoclonal antibody raised against amino acids 329-628 mapping at the C-terminus of HAP1B of mouse origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

HAP1 (C-3) is available conjugated to agarose (sc-166245 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-166245 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-166245 PE), fluorescein (sc-166245 FITC), Alexa Fluor[®] 488 (sc-166245 AF488), Alexa Fluor[®] 546 (sc-166245 AF546), Alexa Fluor[®] 594 (sc-166245 AF594) or Alexa Fluor[®] 647 (sc-166245 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-166245 AF680) or Alexa Fluor[®] 790 (sc-166245 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

HAP1 (C-3) is recommended for detection of HAP1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 HAP1 siRNA (h): sc-94188, HAP1 siRNA (m): sc-63300, HAP1 shRNA Plasmid (h): sc-94188-SH, HAP1 shRNA Plasmid (m): sc-63300-SH, HAP1 shRNA (h) Lentiviral Particles: sc-94188-V and HAP1 shRNA (m) Lentiviral Particles: sc-63300-V.

Molecular Weight of HAP1A: 75 kDa.

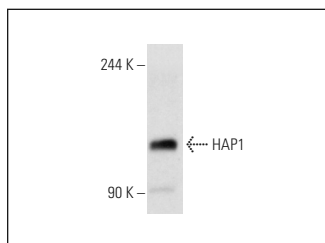
Molecular Weight of HAP1B: 85 kDa.

Positive Controls: mouse cerebellum extract: sc-2403, rat brain extract: sc-2392 or COLO 320DM cell lysate: sc-2226.

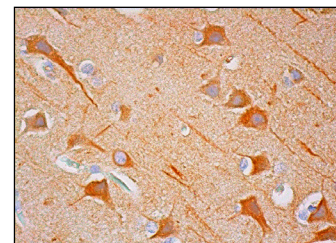
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



HAP1 (C-3): sc-166245. Western blot analysis of HAP1 expression in COLO 320DM whole cell lysate.



HAP1 (C-3): sc-166245. Immunoperoxidase staining of formalin fixed, paraffin-embedded human cerebral cortex tissue showing cytoplasmic staining of neuronal cells and glial cells.

SELECT PRODUCT CITATIONS

1. Yang, M., Lim, Y., Li, X., Zhong, J.H. and Zhou, X.F. 2011. Precursor of brain-derived neurotrophic factor (proBDNF) forms a complex with huntingtin associated protein-1 (HAP1) and sortilin that modulates proBDNF trafficking, degradation and processing. *J. Biol. Chem.* 286: 16272-1684.

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 for detailed protocols and support products.

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