

HAP1 Antibody

HAP1: Huntingtin-associated protein 1, neuroan 1, HLP, HIP5

CATALOG No.:4205

BACKGROUND:

Huntington's disease (HD), a neurodegenerative disorder characterized by loss of striatal neurons, is caused by an expansion of a polyglutamine tract in the HD protein huntingtin (reviewed in 1). HAP1 was initially identified through a two-hybrid library screening; the binding of HAP1 to huntingtin correlated with the expansion of the polyglutamine tract (2). HAP1 also interacts with two cytoskeletal proteins (dynactin and pericentriolar autoantigen protein 1), suggesting that HAP1 may play a role in vesicular trafficking or organelle transport (3). HAP1 is also involved with the huntingtin-enhanced BDNF transport along the cellular microtubules. Attenuation of this process led to the loss of neurotrophic support and neuronal toxicity, which suggests that loss of this function might contribute to pathogenesis (4). Several alternatively spliced isoforms have been described for HAP1.

SOURCE:

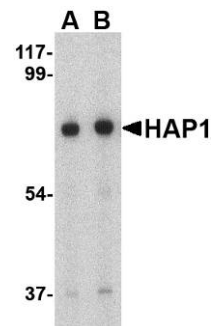
Rabbit polyclonal HAP1 antibody was raised against a 19 amino acid peptide from near the center of human HAP1 (GenBank accession no. CAC09418).

APPLICATION:

HAP1 antibody can be used for detection of HAP1 by Western blot at 0.5 – 1 µg/ml. (Optimal dilution should be determined by user.) Mouse brain tissue lysate can be used as positive control. HAP1 antibody is human, mouse and rat reactive. **For research use only.**

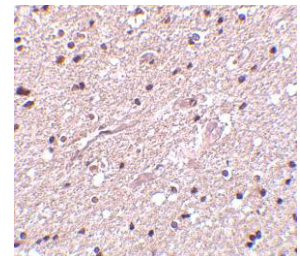
STORAGE:

HAP1 antibody is supplied as immunoaffinity purified IgG in PBS containing 0.02% sodium azide. Store at 4°C, stable for one year.



Western blot analysis of HAP1 in mouse brain tissue lysate with HAP1 antibody at (A) 0.5 and (B) 1 µg/ml.

Immunohistochemistry of HAP1 in human brain tissue with HAP1 antibody at 2.5 µg/ml.



RELATED PRODUCTS:

Blocking Peptide, Catalog No. **4205P**.

Mouse Brain Tissue Lysate, Catalog No. **1403**.

TSLP Antibody (CT), Catalog No. **4021**.

REFERENCES:

1. Borrell-Pagès M, Zala D, Humbert S, et al. Huntington's disease: from huntingtin function and dysfunction to therapeutic strategies. *Cell Mol. Life Sci.* 2006; 63:2642-60.
2. Li X-J, L S-H, Sharp AH, et al. A huntingtin-associated protein enriched in brain with implications for pathology. *Nature* 1995; 378:398-402.
3. Engelender S, Sharp AH, Colomer V, et al. Huntingtin-associated protein 1 (HAP1) interacts with the p150(Glued) subunit of dynactin. *Hum. Molec. Genet.* 1997; 6:2205-12.
4. Gauthier LR, Charrin BC, Borrell-Pages M, et al. Huntingtin controls neurotrophic support and survival of neurons by enhancing BDNF vesicular transport along microtubules. *Cell* 2004; 118:127-38. (07-01D)