

HAPLN2 (F-7): sc-376797

BACKGROUND

HAPLN2 (hyaluronan and proteoglycan link protein 2, brain link protein 1) is a 340 amino acid protein encoded by the human gene HAPLN2. HAPLN2 belongs to the HAPLN family and contains one immunoglobulin (Ig)-like, V-type domain and two link domains. HAPLN2 mediates a firm binding of versican V2 to hyaluronic acid. HAPLN2 is believed to play a pivotal role in the formation of the hyaluronan-associated matrix in the central nervous system (CNS), which facilitates neuronal conduction and general structural stabilization. HAPLN2 may also be involved in the formation of extracellular matrices, contributing to perineuronal nets and facilitating the understanding of a functional role of these extracellular matrices. HAPLN2 is found in several nuclei throughout the midbrain and hindbrain in a perineuronal net pattern.

REFERENCES

1. Deyst, K.A. and Toole, B.P. 1996. Production of hyaluronan-dependent pericellular matrix by embryonic rat glial cells. *Brain Res. Dev. Brain Res.* 88: 122-125.
2. Hirakawa, S., et al. 2000. The brain link protein-1 (Bral1): cDNA cloning, genomic structure, and characterization as a novel link protein expressed in adult brain. *Biochem. Biophys. Res. Commun.* 276: 982-989.
3. Oohashi, T., et al. 2002. Bral1, a brain-specific link protein, colocalizing with the versican V2 isoform at the nodes of Ranvier in developing and adult mouse central nervous systems. *Mol. Cell. Neurosci.* 19: 43-57.
4. Nomoto, H., et al. 2002. Human BRAL1 and BCAN genes that belong to the link-module superfamily are tandemly arranged on chromosome 1q21-23. *Acta Med. Okayama* 56: 25-29.

CHROMOSOMAL LOCATION

Genetic locus: HAPLN2 (human) mapping to 1q23.1; Hapln2 (mouse) mapping to 3 F1.

SOURCE

HAPLN2 (F-7) is a mouse monoclonal antibody raised against amino acids 26-101 mapping within an internal region of HAPLN2 of human 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.

HAPLN2 (F-7) is available conjugated to agarose (sc-376797 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376797 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376797 PE), fluorescein (sc-376797 FITC), Alexa Fluor® 488 (sc-376797 AF488), Alexa Fluor® 546 (sc-376797 AF546), Alexa Fluor® 594 (sc-376797 AF594) or Alexa Fluor® 647 (sc-376797 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376797 AF680) or Alexa Fluor® 790 (sc-376797 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

APPLICATIONS

HAPLN2 (F-7) is recommended for detection of HAPLN2 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

HAPLN2 (F-7) is also recommended for detection of HAPLN2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for HAPLN2 siRNA (h): sc-62437, HAPLN2 siRNA (m): sc-62438, HAPLN2 shRNA Plasmid (h): sc-62437-SH, HAPLN2 shRNA Plasmid (m): sc-62438-SH, HAPLN2 shRNA (h) Lentiviral Particles: sc-62437-V and HAPLN2 shRNA (m) Lentiviral Particles: sc-62438-V.

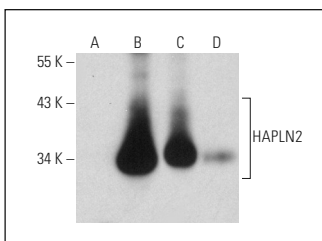
Molecular Weight of HAPLN2: 38 kDa.

Positive Controls: HAPLN2 (h): 293T Lysate: sc-114486, rat brain extract: sc-2392 or human hypothalamus tissue extract.

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.

DATA



HAPLN2 (F-7): sc-376797. Western blot analysis of HAPLN2 expression in non-transfected 293T: sc-117752 (A) and human HAPLN2 transfected 293T: sc-114486 (B) whole cell lysates and human hypothalamus (C) and rat brain (D) tissue extracts.

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.