SANTA CRUZ BIOTECHNOLOGY, INC.

HAPLN4 (H-6): sc-271450

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

HAPLN4 (hyaluronan and proteoglycan link protein 4) is a 360 amino acid protein encoded by the human gene HAPLN4. HAPLN4 belongs to the HAPLN family and contains one Ig-like C2-type (immunoglobulin-like) domain and two Link domains. HAPLN4 mediates the binding of complexes containing hyaluronic acid. HAPLN2 mediates a firm binding of versican V2 to hyaluronic acid. HAPLN4 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. HAPLN4 may also be involved in the formation of extracellular matrices contributing to perineuronal nets and facilitate the understanding of a functional role of these extracellular matrices. HAPLN4 is widely expressed with highest levels in spleen and placenta.

REFERENCES

1. Deyst, K.A. and Toole, B.P. 1995. 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. 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: HAPLN4 (human) mapping to 19p13.11; Hapln4 (mouse) mapping to 8 B3.3.

SOURCE

HAPLN4 (H-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 229-273 within an internal region of HAPLN4 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

HAPLN4 (H-6) is available conjugated to agarose (sc-271450 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-271450 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-271450 PE), fluorescein (sc-271450 FITC), Alexa Fluor® 488 (sc-271450 AF488), Alexa Fluor® 546 (sc-271450 AF546), Alexa Fluor® 594 (sc-271450 AF594) or Alexa Fluor® 647 (sc-271450 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-271450 AF680) or Alexa Fluor® 790 (sc-271450 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-271450 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

HAPLN4 (H-6) is recommended for detection of HAPLN4 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).

Suitable for use as control antibody for HAPLN4 siRNA (h): sc-62441, HAPLN4 siRNA (m): sc-62442, HAPLN4 shRNA Plasmid (h): sc-62441-SH, HAPLN4 shRNA Plasmid (m): sc-62442-SH, HAPLN4 shRNA (h) Lentiviral Particles: sc-62441-V and HAPLN4 shRNA (m) Lentiviral Particles: sc-62442-V.

Molecular Weight of HAPLN4: 42 kDa.

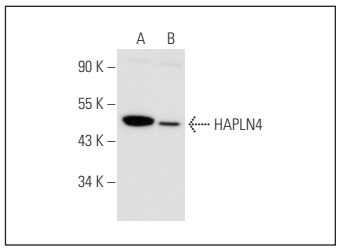
Positive Controls: HEL 92.1.7 cell lysate: sc-2270, Jurkat whole cell lysate: sc-2204 or K-562 whole cell lysate: sc-2203.

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

HAPLN4 (H-6): sc-271450. Western blot analysis of HAPLN4 expression in SJRH30 (**A**), HEL 92.1.7 (**B**), SK-N-SH (**C**), NIH/3T3 (**D**), RAW 264.7 (**E**) and KNRK (**F**) whole cell lysates.



HAPLN4 (H-6): sc-271450. Western blot analysis of HAPLN4 expression in Jurkat (**A**) and K-562 (**B**) whole cell lysates.

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.