

# HAPLN4 (G-18): sc-55113

## 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

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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.
4. Spicer, A.P. and Joo, A. 2003. A hyaluronan binding link protein gene family whose members are physically linked adjacent to chondroitin sulfate proteoglycan core protein genes: the missing links. *J. Biol. Chem.* 278: 21083-21091.
5. Oohashi, T., et al. 2004. Bral1, Bral2: the novel brain specific-hyaluronan and proteoglycan link protein genes. *Tanpakushitsu Kakusan Koso* 49: 2354-2361.
6. Carulli, D., et al. 2005. Composition of perineuronal nets in the adult rat cerebellum and the cellular origin of their components. *J. Comp. Neurol.* 494: 559-577.
7. Carulli, D., et al. 2007. Upregulation of aggrecan, link protein 1, and hyaluronan synthases during formation of perineuronal nets in the rat cerebellum. *J. Comp. Neurol.* 501: 83-94.

## CHROMOSOMAL LOCATION

Genetic locus: HAPLN4 (human) mapping to 19p13.11; Hapln4 (mouse) mapping to 8 B3.3.

## SOURCE

HAPLN4 (G-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of HAPLN4 of human origin.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PRODUCT

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

Blocking peptide available for competition studies, sc-55113 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

HAPLN4 (G-18) is recommended for detection of HAPLN4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

HAPLN4 (G-18) is also recommended for detection of HAPLN4 in additional species, including equine and bovine.

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.

## 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) 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.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.