

# HAPLN1 (N-14): sc-46827

## BACKGROUND

The human cartilage link protein, also designated HAPLN1, is a member of the hyaluronan and proteoglycan link protein (HAPLN) family of proteins. This family contains four proteins with approximately 50% homology. HAPLN1 strengthens tissue architecture by using hyaluronic acid to stabilize the aggregates of proteoglycan monomers inside the extracellular cartilage matrix. It is widely expressed in most tissue types except brain tissue, where, much like the other human cartilage link protein genes, it is weakly expressed. The HAPLN and the brain-specific CSPG genes, as well as other members of the link module superfamily, appear to have a common ancestral gene origin.

## REFERENCES

1. Osborne-Lawrence, S.L., et al. 1990. Complete amino acid sequence of human cartilage link protein (CRTL1) deduced from cDNA clones and chromosomal assignment of the gene. *Genomics* 8: 562-567.
2. Rhodes, C., et al. 1991. Characterization of the promoter for the rat and human link protein gene. *Nucleic Acids Res.* 19: 1933-1939.
3. Colas, J.F., et al. 2003. Assessing the contributions of gene products to the form-shaping events of neurulation: a transgenic approach in chick. *Genesis* 37: 64-75.
4. Czipri, M., et al. 2003. Genetic rescue of chondrodysplasia and the perinatal lethal effect of cartilage link protein deficiency. *J. Biol. Chem.* 278: 39214-39223.
5. Kou, I., et al. 2004. SOX-9-dependent and -independent transcriptional regulation of human cartilage link protein. *J. Biol. Chem.* 279: 50942-50948.
6. Naishiro, Y., et al. 2005. Morphological and transcriptional responses of untransformed intestinal epithelial cells to an oncogenic  $\beta$ -catenin protein. *Oncogene* 24: 3141-3153.

## CHROMOSOMAL LOCATION

Genetic locus: HAPLN1 (human) mapping to 5q14.3; Hapln1 (mouse) mapping to 13 C3.

## SOURCE

HAPLN1 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of HAPLN1 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-46827 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

HAPLN1 (N-14) is recommended for detection of HAPLN1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

HAPLN1 (N-14) is also recommended for detection of HAPLN1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for HAPLN1 siRNA (h): sc-60094, HAPLN1 siRNA (m): sc-60095, HAPLN1 shRNA Plasmid (h): sc-60094-SH, HAPLN1 shRNA Plasmid (m): sc-60095-SH, HAPLN1 shRNA (h) Lentiviral Particles: sc-60094-V and HAPLN1 shRNA (m) Lentiviral Particles: sc-60095-V.

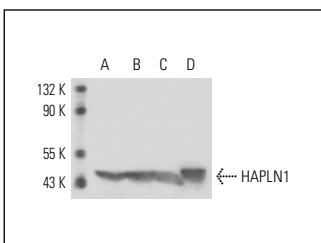
Molecular Weight of HAPLN1: 40-42 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Caco-2 cell lysate: sc-2262 or HISM cell lysate: sc-2229.

## 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

## DATA



HAPLN1 (N-14): sc-46827. Western blot analysis of HAPLN1 expression in Caco-2 (A), HeLa (B) and HISM (C) whole cell lysates and rat small intestine tissue extract (D).

## 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.