CHADL (S-15): sc-86530



The Power to Question

BACKGROUND

Members of the small leucine-rich proteoglycan (SLRP) family are mostly extracellular proteins that function upstream of multiple signaling cascades. They affect intracellular phosphorylation and modulate distinct pathways, such as those driven by toll-like receptors, $TGF\beta$ and receptor tyrosine kinases. As a member of the SLRP family, CHADL (chondroadherin-like protein) is a 762 amino acid protein containing 21 LRR (leucine-rich) repeats, which promote protein-ligand interactions. Chondroadherin, a closely related protein, promotes attachment of chrondocytes, osteoblasts and fibroblasts and also plays an important role in the regulation of chrodrocyte proliferation and growth. CHADL is a secreted protein that is located in the extracellular space. There are two isoforms of CHADL that exist as a result of alternative splicing events.

REFERENCES

- Grover, J., Chen, X.N., Korenberg, J.R. and Roughley, P.J. 1997. The structure and chromosome location of the human chondroadherin gene (CHAD). Genomics 45: 379-385.
- 2. Camper, L., Heinegard, D. and Lundgren-Akerlund, E. 1997. Integrin α 2/ β 1 is a receptor for the cartilage matrix protein chondroadherin. J. Cell Biol. 138: 1159-1167.
- Landgren, C., Beier, D.R., Fässler, R., Heinegard, D. and Sommarin, Y. 1998.
 The mouse chondroadherin gene: characterization and chromosomal localization. Genomics 47: 84-91.
- Mansson, B., Wenglen, C., Mörgelin, M., Saxne, T. and Heinegard, D. 2001. Association of chondroadherin with collagen type II. J. Biol. Chem. 276: 32883-32888.
- Wiberg, C., Heinegard, D., Wenglen, C., Timpl, R. and Mörgelin, M. 2002.
 Biglycan organizes collagen VI into hexagonal-like networks resembling tissue structures. J. Biol. Chem. 277: 49120-49126.
- Wang, W., Yang, Y., Li, L. and Shi, Y. 2003. Synleurin, a novel leucine-rich repeat protein that increases the intensity of pleiotropic cytokine responses. Biochem. Biophys. Res. Commun. 305: 981-988.
- Schaefer, L. and Iozzo, R.V. 2008. Biological functions of the small leucinerich proteoglycans: from genetics to signal transduction. J. Biol. Chem. 283: 21305-21309.

CHROMOSOMAL LOCATION

Genetic locus: CHADL (human) mapping to 22q13.2.

SOURCE

CHADL (S-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of CHADL of human origin.

PRODUCT

Each vial contains 100 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-86530 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CHADL (S-15) is recommended for detection of CHADL of 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).

Suitable for use as control antibody for LOC150356 siRNA (h): sc-75443, LOC150356 shRNA Plasmid (h): sc-75443-SH and LOC150356 shRNA (h) Lentiviral Particles: sc-75443-V.

Molecular Weight of CHADL: 82 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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 or our catalog for detailed protocols and support products.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 **Europe** +00800 4573 8000 49 6221 4503 0 **www.scbt.com**