

CHRDL1 (SS-6): sc-100333

BACKGROUND

The patterning of the central nervous system (CNS) relies on the interaction of multiple signaling molecules, including Shh (sonic hedgehog homolog), Wnt proteins and BMPs (bone morphogenetic proteins), with their antagonists, namely chordin and Noggin. Chordin is a key developmental protein that dorsalizes early vertebrate embryonic tissues by binding to ventralizing TGF β -like BMPs and sequestering them in latent complexes. CHRDL1 (chordin-like protein 1), also known as CHL, VOPT (ventroptin) or NRLN1 (neuralin-1), is a 450 amino acid secreted protein that contains three VWFC domains. Functioning in a similar manner to chordin, CHRDL1 binds to BMP-4 and prevents the interaction of BMP-4 with its target receptors, thereby antagonizing BMP-4 activity. Additionally, CHRDL1 is thought to play a role in dorso-ventral axis formation, embryonic bone formation and angiogenesis, as well as in the differentiation of neural stem cells.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CHRDL1 (human) mapping to Xq22.3; Chrdl1 (mouse) mapping to X F2.

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.

SOURCE

CHRDL1 (SS-6) is a mouse monoclonal antibody raised against recombinant CHRDL1 of human origin.

PRODUCT

Each vial contains 50 μ g IgG₁ in 500 μ l PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

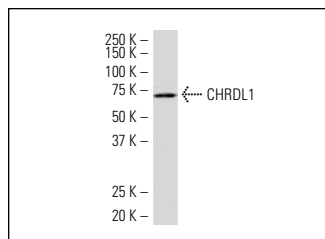
CHRDL1 (SS-6) is recommended for detection of CHRDL1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CHRDL1 siRNA (h): sc-91247, CHRDL1 siRNA (m): sc-142336, CHRDL1 shRNA Plasmid (h): sc-91247-SH, CHRDL1 shRNA Plasmid (m): sc-142336-SH, CHRDL1 shRNA (h) Lentiviral Particles: sc-91247-V and CHRDL1 shRNA (m) Lentiviral Particles: sc-142336-V.

Molecular Weight of CHRDL1: 60 kDa.

Positive Controls: SK-N-SH cell lysate: sc-2410 or HeLa nuclear extract: sc-2120.

DATA



CHRDL1 (SS-6): sc-100333. Western blot analysis of CHRDL1 expression in HeLa nuclear extract.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.