



Rabbit Anti-CHRDL1 antibody

SL11819R

Product Name:	CHRDL1
Chinese Name:	脊索生成素样蛋白1抗体
Alias:	CHL; chordin like 1; Chordin-like protein 1; CHRDL1; CRDL1_HUMAN; dA141H5.1; neuralin 1; Neuralin-1; Neurogenesin-1; NRLN1; Ventroptin; VOPT.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	49kDa
Cellular localization:	Secretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human CHRDL1:21-120/450
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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-beta-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 dorsoventral axis formation, embryonic bone formation and angiogenesis, as well as in the differentiation of neural stem cells.

Function:

Antagonizes the function of BMP4 by binding to it and preventing its interaction with receptors. Alters the fate commitment of neural stem cells from gliogenesis to neurogenesis. Contributes to neuronal differentiation of neural stem cells in the brain by preventing the adoption of a glial fate. May play a crucial role in dorsoventral axis formation. May play a role in embryonic bone formation (By similarity). May also play an important role in regulating retinal angiogenesis through modulation of BMP4 actions in endothelial cells.

Subcellular Location:

Secreted.

Tissue Specificity:

Expressed in the developing cornea and in the eye anterior segment in addition to the retina. Differentially expressed in the fetal brain. There is high expression in cerebellum and neocortex. Expressed in retinal pericytes.

Similarity:

Contains 3 VWFC domains.

SWISS:

Q9BU40

Gene ID:

91851

Database links:

[Entrez Gene: 91851](#)Human

[Entrez Gene: 83453](#)Mouse

[Omim: 300350](#)Human

[SwissProt: Q9BU40](#)Human

[SwissProt: Q920C1](#)Mouse

[Unigene: 496587](#)Human

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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