10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CHRDL1 Rabbit pAb

Catalog # AP96331

Product Information

Application	WB
Primary Accession	Q9BU40
Other Accession	Q9BU40
Reactivity	Mouse
Predicted	Rat, Pig, Human, Chicken, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	52026
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human CHRDL1
Epitope Specificity	21-120/450
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 3 VWFC domains.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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.

Additional Information

Gene ID	91851
Other Names	CHL; MGC1; MGCN; NRLN1; VOPT; dA141H5.1; CHL1; CRDL1_HUMAN; CHRDL1; Neuralin-1; Neurogenesin-1; Ventroptin; CRDL1_MOUSE; Ng1; chordin like 1; megalocornea 1 (X-linked)
Dilution	WB=1:500-2000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name	CHRDL1
Synonyms	NRLN1
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. Plays a role during anterior segment eye development.
Cellular Location	Secreted.
Tissue Location	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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.