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CHRDL2 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP58102

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q6WN34
Reactivity	Rat, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	47495
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human CHRDL2
Epitope Specificity	351-429/429
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Isoform 1: Secreted (Potential). Isoform 2: Secreted (Potential). Isoform 3: Cytoplasm (Potential). Isoform 4: Cytoplasm (Potential). Isoform 5: Cytoplasm (Potential).
SIMILARITY	Contains 3 VWFC domains.
SUBUNIT	Interacts with GDF5 (By similarity). May interact with BMP2, BMP4, BMP5, BMP6, BMP7 and INHBA.
Post-translational modifications	Phosphorylation sites are present in the extracellular medium. Isoform 2 is phosphorylated on Ser-402.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	CHRDL2 is a novel chordin like protein that can act as a BMP antagonist. A member of the chordin family of proteins, it contains a signal peptide and three CR (cysteine-rich repeat) domains. When expressed as a recombinant protein it is secreted and binds to activin A, but not to BMP-2, -4, -6. Differential expression has been detected in developing chondrocytes, myoblasts, osteoblasts, and osteoarthritic joints. Complex alternative splicing of CHRDL2 potentially results in distinct isoforms that differ at their C termini, in the expression of signal peptide, and in the content of CR domains. CHRDL2 was originally characterized as a novel protein exclusively expressed in breast, lung, and colon tumors.

Additional Information

Gene ID	25884
Other Names	Chordin-like protein 2, Breast tumor novel factor 1, BNF-1, Chordin-related protein 2, CHRDL2, BNF1, CHL2
Target/Specificity	Highly expressed in uterus. Moderately expressed in heart, liver, prostate,

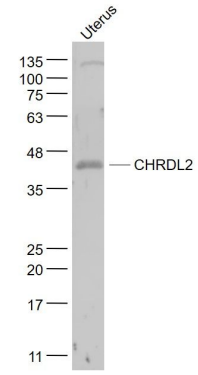
	testis and ovary. Weakly expressed in skeletal muscle, kidney, spleen, small intestine and colon. Expressed in the secretory epithelial cells of uterine endometrium, fallopian tubes, endocervical glands, bladder and prostate, as well as the transitional epithelium of the urinary bladder, and in bone osteoblasts (at protein level). In normal cartilage, expression was confined in a few chondrocytes in the superficial zone as well as in the middle zone. In diseased cartilage coming from osteoarthritic patients, expression was limited to the middle zone of chondrocytes. Isoform 1 and isoform 2 are expressed in fetal cerebellum and heart, while only isoform 2 is detected in fetal spleen. Isoform 2 present in plasma.
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
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.

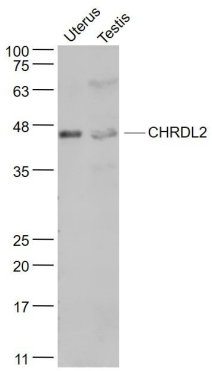
Protein Information

Name	CHRDL2
Synonyms	BNF1, CHL2
Function	May inhibit BMPs activity by blocking their interaction with their receptors. Has a negative regulator effect on the cartilage formation/regeneration from immature mesenchymal cells, by preventing or reducing the rate of matrix accumulation (By similarity). Implicated in tumor angiogenesis. May play a role during myoblast and osteoblast differentiation, and maturation.
Cellular Location	[Isoform 1]: Secreted. [Isoform 3]: Cytoplasm. [Isoform 5]: Cytoplasm.
Tissue Location	Highly expressed in uterus. Moderately expressed in heart, liver, prostate, testis and ovary. Weakly expressed in skeletal muscle, kidney, spleen, small intestine and colon. Expressed in the secretory epithelial cells of uterine endometrium, fallopian tubes, endocervical glands, bladder and prostate, as well as the transitional epithelium of the urinary bladder, and in bone osteoblasts (at protein level). In normal cartilage, expression was confined in a few chondrocytes in the superficial zone as well as in the middle zone. In diseased cartilage coming from osteoarthritic patients, expression was limited to the middle zone of chondrocytes. Isoform 1 and isoform 2 are expressed in fetal cerebellum and heart, while only isoform 2 is detected in fetal spleen. Isoform 2 present in plasma

Images

Sample:
Uterus(Mouse) Lysate at 40 ug
Primary: Anti- CHRDL2 (AP58102) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 45 kD
Observed band size: 45 kD





Sample:
Uterus (Rat) Lysate at 40 ug
Testis (Rat) Lysate at 40 ug
Primary: Anti- CHRDL2 (AP58102) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 45 kD
Observed band size: 45 kD