

CHRDL2 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58102

Specification

Physical State

CHRDL2 Polyclonal Antibody - Product Information

Application WB, IHC-P, IHC-F, IF, E

Primary Accession
Reactivity
Rat, Bovine
Host
Clonality
Calculated MW
Rat, Bovine
Rabbit
Polyclonal
45 KDa

Immunogen KLH conjugated synthetic peptide derived

Liquid

laG

from human CHRDL2

Epitope Specificity 351-429/429

Isotype
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.

CHRDL2 Polyclonal Antibody - 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

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<span class ="dilution_WB">WB~~1:1000</span><br \><span class
="dilution_IHC-P">IHC-P~~N/A</span><br \><span class
="dilution_IHC-F">IHC-F~~N/A</span><br \><span class
="dilution_IF">IF~~1:50~200</span><br \><span class ="dilution_E">E~~N/A</span>
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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.

CHRDL2 Polyclonal Antibody - 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

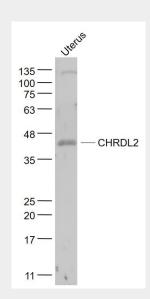
CHRDL2 Polyclonal Antibody - Protocols



Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CHRDL2 Polyclonal Antibody - Images



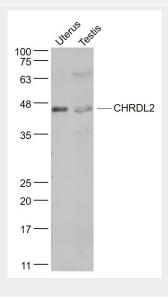
Sample:

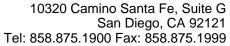
Uterus(Mouse) Lysate at 40 ug

Primary: Anti- CHRDL2 (bs-3860R) 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 (bs-3860R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 45 kD Observed band size: 45 kD