

# Rabbit Anti-CHRDL2 antibody

# SL3860R

Product Name:	CHRDL2
Chinese Name:	乳腺Tumour新因子1抗体
Alias:	BNF1; Breast tumor novel factor 1; CHL2; chordin like 2; Chordin like protein 2 precursor; Chordin related protein 2; CRDL2 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Cow, Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=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:	45kDa
Cellular localization:	Secretory protein
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human CHRDL2:351-429/429
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:	<u>PubMed</u>
Product Detail:	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.

#### 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.

#### **Subunit:**

Interacts with GDF5 (By similarity). May interact with BMP2, BMP4, BMP5, BMP6, BMP7 and INHBA.

#### **Subcellular Location:**

Isoform 1: Secreted (Potential).

Isoform 2: Secreted (Potential).

Isoform 3: Cytoplasm (Potential).

Isoform 4: Cytoplasm (Potential).

Isoform 5: Cytoplasm (Potential).

# Tissue 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.

## **Post-translational modifications:**

Phosphorylation sites are present in the extracellular medium. Isoform 2 is phosphorylated on Ser-402.

#### Similarity:

Contains 3 VWFC domains.

#### SWISS:

O6WN34

## Gene ID:

25884

# Database links:

Entrez Gene: 25884Human

Omim: 613127Human

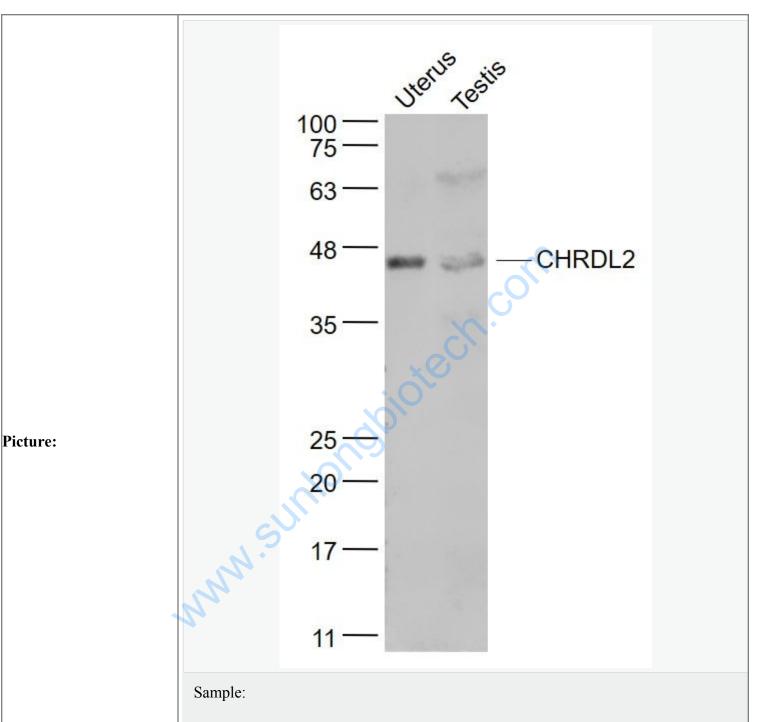
SwissProt: Q6WN34Human

Unigene: 432379Human

# **Important Note:**

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

CHRDL2原来主要用于乳腺癌的研究,近年来研究发现在Tumour中也有发现,目前在肺癌,结肠Tumour的研究中应用较多。

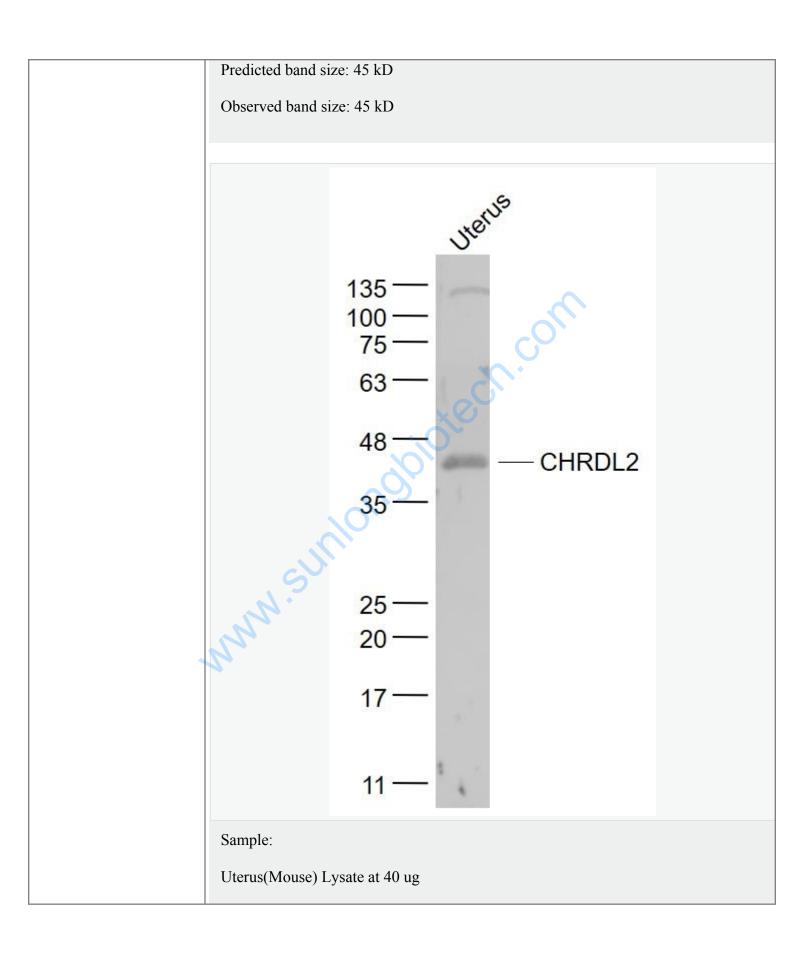


Uterus (Rat) Lysate at 40 ug

Testis (Rat) Lysate at 40 ug

Primary: Anti- CHRDL2 (SL3860R) at 1/1000 dilution

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



Primary: Anti- CHRDL2 (SL3860R) at 1/1000 dilution

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

Predicted band size: 45 kD

Observed band size: 45 kD

