

CILP Rabbit pAb

CILP Rabbit pAb
Catalog # AP55354

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	075339
Reactivity	Rat, Human, Mouse
Predicted	Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	132565
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human CILP
Epitope Specificity	1051-1184/1184
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	Secreted > extracellular space > extracellular matrix.
DISEASE	Defects in CILP are a cause of susceptibility to intervertebral disk disease (IDD) [MIM:603932]. A common musculo-skeletal disorder caused by degeneration of intervertebral disks of the lumbar spine. It results in low-back pain and unilateral leg pain. Note=Susceptibility to intervertebral disk disease, is conferred by variant p.Ile395Thr (PubMed:15864306).
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Major alterations in the composition of the cartilage extracellular matrix occur in joint disease, such as osteoarthritis. This gene encodes the cartilage intermediate layer protein (CILP), which increases in early osteoarthritis cartilage. The encoded protein was thought to encode a protein precursor for two different proteins; an N-terminal CILP and a C-terminal homolog of NTPPHase, however, later studies identified no nucleotide pyrophosphatase phosphodiesterase (NPP) activity. The full-length and the N-terminal domain of this protein was shown to function as an IGF-1 antagonist. An allelic variant of this gene has been associated with lumbar disc disease. [provided by RefSeq, Sep 2010]

Additional Information

Gene ID	8483
Other Names	Cartilage intermediate layer protein 1, CILP-1, Cartilage intermediate-layer protein, Cartilage intermediate layer protein 1 C1, Cartilage intermediate layer protein 1 C2, CILP
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

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

CILP

Function

Probably plays a role in cartilage scaffolding. May act by antagonizing TGF-beta1 (TGFB1) and IGF1 functions. Has the ability to suppress IGF1-induced proliferation and sulfated proteoglycan synthesis, and inhibits ligand-induced IGF1R autophosphorylation. May inhibit TGFB1-mediated induction of cartilage matrix genes via its interaction with TGFB1. Overexpression may lead to impair chondrocyte growth and matrix repair and indirectly promote inorganic pyrophosphate (PPi) supersaturation in aging and osteoarthritis cartilage.

Cellular Location

Secreted, extracellular space, extracellular matrix

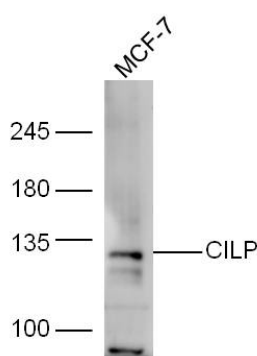
Tissue Location

Specifically expressed in cartilage. Localizes in the intermediates layer of articular cartilage but neither in the superficial nor in the deepest regions. Specifically and highly expressed in intervertebral disk tissue. Expression increases with aging in hip articular cartilage. Overexpressed in articular hyaline cartilage from patients with calcium pyrophosphate dihydrate crystal deposition disease (CPPD). Expression in intervertebral disk tissue from individuals with lumbar disk disease increases as disk degeneration progresses.

Background

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

Images



Sample:

MCF-7 Cell (Human) Lysate at 30 ug

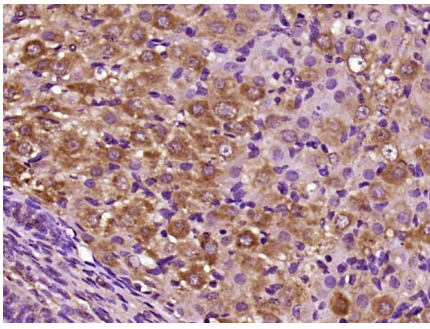
Primary: Anti-CILP (AP55354) at 1/300 dilution

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

Predicted band size: 132 kD

Observed band size: 132 kD

Paraformaldehyde-fixed, paraffin embedded (Rat ovary); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CILP) Polyclonal Antibody, Unconjugated (AP55354) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023)



instructions and DAB staining.

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