abcam

Product datasheet

Recombinant Human CILP protein ab160049

1 Image

Description

Product name	Recombinant Human CILP protein
Expression system	Wheat germ
Protein length	Protein fragment
Animal free	No
Nature	Recombinant
Species	Human
Sequence	NCSNYTVRFLCPPGSLRRDTERIWSPWSPWSKCSAACG QTGVQTRTRICL AEMVSLCSEASEEGQHCMGQDCTACDLTCPMGQVNAD CDACMCQDFML
Amino acids	129 to 226
Tags	GST tag N-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab160049** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Western blot ELISA
Form	Liquid
Additional notes	Protein concentration is above or equal to 0.05 mg/ml.

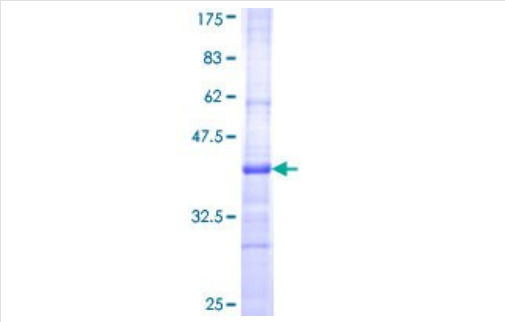
Preparation and Storage

Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80ºC. Avoid freeze / thaw cycles. pH: 8.00 Constituents: 0.31% Glutathione, 0.79% Tris HCl

General Info

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.
Tissue specificity	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.
Involvement in 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).
Sequence similarities	Contains 1 Ig-like C2-type (immunoglobulin-like) domain. Contains 1 TSP type-1 domain.
Post-translational modifications	Cleaved into 2 chains possibly by a furin-like protease upon or preceding secretion.
Cellular localization	Secreted > extracellular space > extracellular matrix.

Images



SDS-PAGE - Recombinant Human CILP protein (ab160049)

ab160049 on a 12.5% SDS-PAGE stained with Coomassie Blue.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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