CILP1 Monoclonal Antibody

Catalog No	YP-mAb-06832
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB
Gene Name	CILP UNQ602/PRO1188
Protein Name	Cartilage intermediate layer protein 1 (CILP-1) (Cartilage intermediate-layer protein) [Cleaved into: Cartilage intermediate layer protein 1 C1; Cartilage intermediate layer protein 1 C2]
Immunogen	Synthesized peptide derived from part region of human protein
Specificity	CILP1 Monoclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	
Observed Band	130kD
Cell Pathway	Secreted, extracellular space, extracellular matrix .
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.
Function	caution:Was originally thought to constitute the ATP pyrophosphatase enzyme (NTPPH). However, it was later shown (PubMed:12746903 and PubMed:15864306) that it is not the case.,disease:Antibodies against CILP are detected in patients with early-stage knee osteoarthritis (OA) and rheumatoid arthritis (RA). Autoantibodies against the C1 and C2 chains are detected in 10 out of 136 and 17 out of 136 patient with OA, respectively.,disease:Defects in CILP may be a cause of susceptibility to lumbar disk disease (LDD). LDD is caused by degeneration of intervertebral disk of the lumbar spine, and its associated disk degeneration and concomitant disk herniation are a primary cause of low back

	pain and unilateral leg pain (sciatica).,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 prolifer
Background	Major alterations in the composition of the cartilage extracellular matrix occur in joint disease, such as osteoarthrosis. This gene encodes the cartilage intermediate layer protein (CILP), which increases in early osteoarthrosis 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],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

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