

ARG82456 Human CILP ELISA Kit

Package: 96 wells
Store at: 4°C

Component

Cat. No.	Component Name	Package	Temp
ARG82456-001	Antibody-coated microplate	8 X 12 strips	4°C. Unused strips should be sealed tightly in the air-tight pouch.
ARG82456-002	Standard	2 X 10 ng/vial	4°C
ARG82456-003	Standard/Sample diluent	30 ml (Ready to use)	4°C
ARG82456-004	Antibody conjugate concentrate (100X)	1 vial (100 µl)	4°C
ARG82456-005	Antibody diluent buffer	12 ml (Ready to use)	4°C
ARG82456-006	HRP-Streptavidin concentrate (100X)	1 vial (100 µl)	4°C
ARG82456-007	HRP-Streptavidin diluent buffer	12 ml (Ready to use)	4°C
ARG82456-008	25X Wash buffer	20 ml	4°C
ARG82456-009	TMB substrate	10 ml (Ready to use)	4°C (Protect from light)
ARG82456-010	STOP solution	10 ml (Ready to use)	4°C
ARG82456-011	Plate sealer	4 strips	Room temperature

Summary

Product Description	ARG82456 Human CILP ELISA Kit is an Enzyme Immunoassay kit for the quantification of Human CILP in serum, plasma (EDTA, heparin, citrate) and cell culture supernatants.
Tested Reactivity	Hu
Tested Application	ELISA
Target Name	CILP
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	50 pg/ml
Sample Type	Serum, plasma (EDTA, heparin, citrate) and cell culture supernatants.
Standard Range	93.8 - 6000 pg/ml
Sample Volume	100 µl
Precision	Intra-Assay CV: 5.4% Inter-Assay CV: 5.9%

Alternate Names Cartilage intermediate layer protein 1; Cartilage intermediate-layer protein; CILP-1; HsT18872

Application Instructions

Assay Time ~ 5 hours

Properties

Form 96 well

Storage instruction Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol CILP

Gene Full Name cartilage intermediate layer protein, nucleotide pyrophosphohydrolase

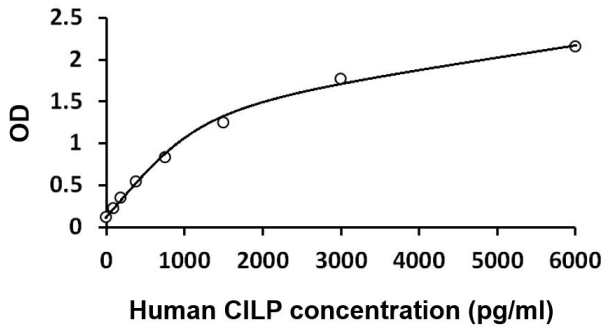
Background Major alterations in the composition of the cartilage extracellular matrix occur in joint disease, such as osteoarthritis. This gene encodes the cartilage intermediate layer protein (CILP), which increases in early osteoarthritis cartilage. The encoded protein was thought to encode a protein 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]

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. [UniProt]

Highlight Related products:
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New ELISA data calculation tool:
[Simplify the ELISA analysis by GainData](#)

PTM Cleaved into 2 chains possibly by a furin-like protease upon or preceding secretion. [UniProt]

Cellular Localization Secreted, extracellular space, extracellular matrix. [UniProt]



ARG82456 Human CILP ELISA Kit standard curve image

ARG82456 Human CILP ELISA Kit results of a typical standard run with optical density reading at 450 nm.