

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human CILP-1 N-Terminal Fragment in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human CILP-1 C-terminal peptide is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human CILP-1 N-Terminal Fragment Arg22-Arg720 Accession # NP_003604
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

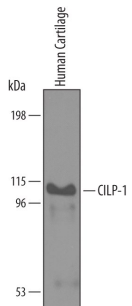
## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
<b>Western Blot</b>	1 µg/mL	See Below
<b>Simple Western</b>	10 µg/mL	See Below

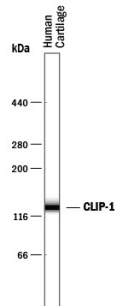
## DATA

**Western Blot**



**Detection of Human CILP-1 N-Terminal Fragment by Western Blot.**  
Western blot shows lysates of human cartilage tissue. PVDF membrane was probed with 1 µg/mL of Goat Anti-Human CILP-1 N-Terminal Fragment Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5504) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF019). A specific band was detected for CILP-1 at approximately 100-110 kDa (as indicated). This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 8](#).

**Simple Western**



**Detection of Human CILP-1 by Simple Western™.** Simple Western lane view shows lysates of human cartilage tissue, loaded at 0.2 mg/mL. A specific band was detected for CILP-1 at approximately 133 kDa (as indicated) using 10 µg/mL of Goat Anti-Human CILP-1 N-Terminal Fragment Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5504) followed by 1:50 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). This experiment was conducted under reducing conditions and using the 66-440 kDa separation system.

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

The CILP-1 (cartilage intermediate-layer protein 1) gene product is a 132 kDa (predicted) monomeric glycoprotein that is found in both hyaline and fibrocartilage. It is a precursor for two secreted, proteolytically generated products, a 90 kDa N-terminal CILP-1, and a 62 kDa C-terminal NTPPHase-homolog. The N-terminus is suggested to serve as both a matrix structural protein, and an IGF-1/TGF-β1 suppressor sequestration molecule. Human CILP-1 spans aa 22-720 of the CILP-1 precursor. It contains one TSP-1 domain (aa 149-201), a C2-type Ig-like region (aa 309-395) and six potential N-glycosylation sites. Over aa 1-720 of the CILP-1 precursor, human CILP-1 shares 89% aa identity with mouse CILP-1, and 42% aa identity with human CILP-2.