

DESCRIPTION

Species Reactivity	Human
Specificity	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.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human CILP-1 N-Terminal Fragment Arg22-Arg720 Accession # NP_003604
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

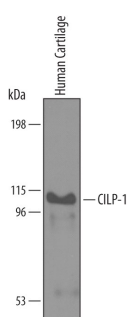
APPLICATIONS

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
Western Blot	1 µg/mL	See Below
Simple Western	10 µg/mL	See Below

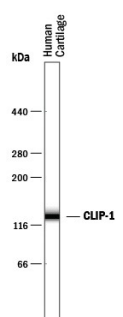
DATA

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

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	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
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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-I/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.