

DESCRIPTION	
Species Reactivity	Mouse
Specificity	Detects mouse Cyr61/CCN1 in direct ELISAs and Western blots. In direct ELISAs, this antibody shows approximately 10% cross-reactivity with recombinant human Cyr61/CCN1.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant mouse Cyr61/CCN1 Asp176-Gly281 Accession # NP_034646
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 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
Immunohistochemistry	5-15 µg/mL	See Below
Simple Western	10 µg/mL	See Below

DATA

Western Blot

Detection of Mouse Cyr61/CCN1 by Western Blot. Western blot shows lysates of mouse spleenocyte cell, RAW 264.7 mouse monocyte/macrophage cell line, NIH-3T3 mouse embryonic fibroblast cell line, and A20 mouse B cell lymphoma cell line. PVDF membrane was probed with 1 µg/mL of Mouse Cyr61/CCN1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4055) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Cyr61/CCN1 at approximately 50 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunohistochemistry

Cyr61/CCN1 in Mouse Embryo. Cyr61/CCN1 was detected in immersion fixed frozen sections of mouse embryo (13 d.p.c.) using 15 µg/mL Mouse Cyr61/CCN1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4055) overnight at 4 °C. Tissue was stained with the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). Specific labeling was localized to the cytoplasm of muscle cells. View our protocol for [Chromogenic IHC Staining of Frozen Tissue Sections](#).

Simple Western

Detection of Mouse Cyr61/CCN1 by Simple Western™. Simple Western lane view shows lysates of NIH-3T3 mouse embryonic fibroblast cell line, loaded at 0.2 mg/mL. A specific band was detected for Cyr61/CCN1 at approximately 51 kDa (as indicated) using 10 µg/mL of Sheep Anti-Mouse Cyr61/CCN1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4055) followed by 1:50 dilution of HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). This experiment was conducted under reducing conditions and using the 12-230 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

Cyr61, also known as IGFBP-10 and CCN1, is a 50 kDa secreted matrix- and cell-associated protein that regulates the growth and adhesion of vascular endothelial cells, fibroblasts, and monocytes. Cyr61 interacts with cells that express integrins $\alpha V\beta 3$, $\alpha V\beta 5$, $\alpha M\beta 2$, and $\alpha 6\beta 1$. Cyr61 is cleaved by plasmin within its VWF domain which generates an N-terminal fragment that is not associated with the matrix but retains the ability to induce endothelial cell migration. Cyr61 induces VEGF upregulation, angiogenesis, and tumorigenesis. Between amino acids 176-281, mouse Cyr61 shares 87% and 97% amino acid sequence identity with human and rat Cyr61, respectively.