# Mouse Cyr61/CCN1 Antibody

Antigen Affinity-purified Polyclonal Sheep IgG
Catalog Number: AF4055

## DESCRIPTION

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|---|---|
| **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** | *E. coli*-derived recombinant mouse Cyr61/CCN1<br>Asp176-Gly281<br>Accession # NP_034646 |
| **Formulation** | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.<br>*Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS. |

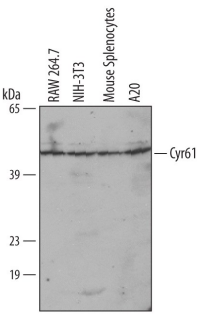
## APPLICATIONS

**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 |

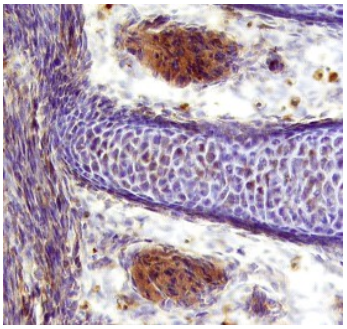
## DATA

### 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.

## PREPARATION AND STORAGE

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|---|---|
| **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.<br>*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.**<br>● 12 months from date of receipt, -20 to -70 °C as supplied.<br>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.<br>● 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 αVβ3, αVβ5, αMβ2, and α6β1. 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.