

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Cyr61/CCN1 in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human Cyr61 is observed.
Source	Monoclonal Rat IgG _{2B} Clone # 466305
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant mouse Cyr61/CCN1 Asp176-Gly281 Accession # P18406
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.

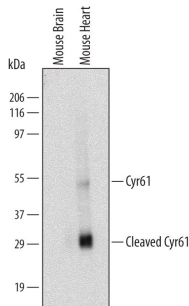
APPLICATIONS

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	2 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	See Below

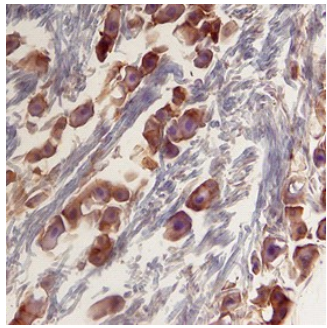
DATA

Western Blot



Detection of Mouse Cyr61 by Western Blot. Western blot shows lysates of mouse brain tissue (negative control) and mouse heart tissue. PVDF membrane was probed with 2 µg/mL of Rat Anti-Mouse Cyr61/CCN1 Monoclonal Antibody (Catalog # MAB4864) followed by HRP-conjugated Anti-Rat IgG Secondary Antibody (Catalog # HAF005). Specific bands were detected for Cyr61 (at approximately 50 kDa) and cleaved Cyr61 (at approximately 25 kDa) (as indicated). This experiment was conducted under non-reducing conditions and using [Immunoblot Buffer Group 1](#).

Immunohistochemistry



Cyr61/CCN1 in Mouse Trigeminal Ganglia. Cyr61/CCN1 was detected in perfusion fixed frozen sections of mouse trigeminal ganglia using 25 µg/mL Rat Anti-Mouse Cyr61/CCN1 Monoclonal Antibody (Catalog # MAB4864) overnight at 4 °C. Tissue was stained with the Anti-Rat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS017) and counterstained with hematoxylin (blue). View our protocol for [Chromogenic IHC Staining of Frozen Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 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 glycoprotein 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.