

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Renin 1 in ELISAs and Western blots. In sandwich immunoassays, approximately 5% cross-reactivity with recombinant rat Renin is observed, and less than 0.2% cross-reactivity with recombinant human Renin is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Renin 1 Leu22-Arg402 Accession # P06281
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.

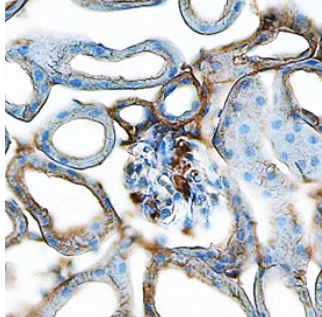
APPLICATIONS

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	0.1 µg/mL	Recombinant Mouse Renin (Catalog # 4277-AS)
Immunohistochemistry	5-15 µg/mL	See Below
Immunoprecipitation	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Mouse Renin (Catalog # 4277-AS), see our available Western blot detection antibodies
Mouse Renin 1 Sandwich Immunoassay		Reagent
ELISA Capture	0.2-0.8 µg/mL	Mouse Renin 1 Antibody (Catalog # AF4277)
ELISA Detection	0.1-0.4 µg/mL	Mouse Renin 1 Biotinylated Antibody (Catalog # BAF4277)
Standard		Recombinant Mouse Renin (Catalog # 4277-AS)

DATA

Immunohistochemistry



Renin in Mouse Kidney. Renin was detected in perfusion fixed frozen sections of mouse kidney using Goat Anti-Mouse Renin 1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4277) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm in glomeruli and tubules. View our protocol for [Chromogenic IHC Staining of Frozen Tissue Sections](#).

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

Mouse Renin is a secreted, 42-47 kDa glycosylated member of the peptidase A1 family. It is an aspartyl protease that cleaves angiotensinogen to form angiotensin I. In mouse, there are two genes that code for Renin. One is in the submandibular gland and the other is in the kidney. The two mature Renin molecules are 95% amino acid (aa) identical. Renal Renin (Renin 1) is synthesized as a 381 aa proform (aa 22-402). In the kidney, pro-Renin is proteolytically cleaved after Thr71 to generate a mature enzyme. Mouse pro Renin shares 70% and 85% aa sequence identity with human and rat pro Renin, respectively.