

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Renin 1 Propeptide in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with the mature form of mouse Renin 1, recombinant human Renin, recombinant mouse (rm) Cathepsin D, or rmCathepsin E is observed.
Source	Monoclonal Rat IgG _{2A} Clone # 434717
Purification	Protein A or G purified from hybridoma culture supernatant
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 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	Recombinant Mouse Renin (Catalog # 4277-AS)

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. 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.