



Recombinant Protein Technical Manual  
Recombinant Mouse REN1/Renin Protein (His Tag)  
RPES0690

Product Data:

**Product SKU:** RPES0690

**Size:** 10µg

**Species:** Mouse

**Expression host:** Human Cells

**Uniprot:** P06281

Protein Information:

**Molecular Mass:** 43.5 kDa

**AP Molecular Mass:** 50-60 kDa

**Tag:** C-His

**Bio-activity:**

**Purity:** > 95% as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from a 0.2 µm filtered solution of PBS, pH7.4.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Renin; Angiotensinogenase; Kidney renin; Ren1; Ren; Ren;Angiotensin-forming enzyme;Ren-A;Ren1c;Ren1d;Rn;Rnr

## Immunogen Information:

**Sequence:** Leu22-Arg402

## Background:

Mouse Renin, also known as Renin, is a member of the peptidase A1 family. Renin is synthesized by the juxtaglomerular cells of the kidney in response to decreased blood pressure and sodium concentration. It cleaves angiotensinogen to generate angiotensin I, which can be further converted by angiotensin converting enzyme (ACE) to angiotensin II. Angiotensin II is the active molecule of the renin-angiotensin system that acts by binding to angiotensin receptors type 1 and 2 (AT1 and AT2), and has direct pathophysiological effects on the heart and peripheral vasculature. After secretion, inactive prorenin can be proteolytically activated by trypsin, cathepsin B, or other proteinases.