

# Recombinant Mouse REN1/Renin-1 Protein (His Tag)

Catalog Number:PKSM041281



**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

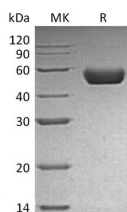
## Description

<b>Synonyms</b>	Renin-1;Angiotensinogenase;Kidney renin;Ren1;Ren;Ren-1;Angiotensin-forming enzyme;Ren-A;Ren1c;Ren1d;Rn-1;Rnr
<b>Species</b>	Mouse
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Leu22-Arg402
<b>Accession</b>	P06281
<b>Calculated Molecular Weight</b>	43.5 kDa
<b>Observed molecular weight</b>	41-60 kDa
<b>Tag</b>	C-His

## Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

## Data



> 95 % as determined by reducing SDS-PAGE.

## Background

Mouse Renin, also known as Renin-1, 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.

## For Research Use Only

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