

Recombinant Mouse Prorenin - Purified

Alternate names:	Angiotensinogenase, HNFJ2, REN, angiotensin-forming enzyme
Catalog No.:	AR31014PU-N
Quantity:	1 mg
Concentration:	1.7 mg/ml (OD280nm, E0.1% = 1.10)
Background:	Renin catalyzes the first step in the activation pathway of angiotensinogen--a cascade that can result in aldosterone release, vasoconstriction, and increase in blood pressure. Renin, an aspartyl protease, cleaves angiotensinogen to form angiotensin I, which is converted to angiotensin II by angiotensin I converting enzyme, an important regulator of blood pressure and electrolyte balance. Transcript variants that encode different protein isoforms and that arise from alternative splicing and the use of alternative promoters have been described, but their full-length nature has not been determined. Mutations in this gene have been shown to cause familial hyperproreninemia.
Uniprot ID:	P06281
NCBI:	NP_112469
GeneID:	19701
Species:	Mouse
Source:	Kidney cells, (Human embryonic)
Format:	State: Liquid purified protein. Purity: >95% by SDS-PAGE (Chelated Metal Affinity Chromatography). Buffer System: 50mM Tris, pH 8.0 without preservatives.
Applications:	Recombinant Mouse Prorenin. Contains 8X-Histidine tag at C terminus. Fully activatable to Renin by catalytic amounts of Trypsin. 381 amino acids + 8 histidine residues. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Description:	Recombinant Mouse Prorenin. Contains 8X-Histidine tag at C terminus. Resistant to activation to Renin by Trypsin digestion. 380 amino acids + 8 histidine residues. Molecular weight: 41,711 Da (less glycosylation)
Add. Information:	Centrifuge before opening to ensure complete recovery of vial contents.
Storage:	Store the antigen at -70°C Aliquot to avoid multiple freeze/thaw cycles. Shelf life: one year from despatch.
General Readings:	1. A.H. Jan Danser, Jaap Deinum (2005), "Renin, Prorenin and the Putative (Pro)renin Receptor." Hypertension 46:1069.

2. Luetscher JA, Kraemer FB, Wilson DM, Schwartz HC, Bryer-Ash M. Increased plasma inactive renin in diabetes mellitus. A marker of microvascular complications. N Engl J Med. 1985 May 30;312(22):1412-7. PubMed PMID: 3887168.