

AR51979PU-N**Mouse Renin-1 (22-402, His-tag) - Purified**

Alternate names:	Angiotensinogenase, Kidney renin, Ren, Ren-A, Ren1, Ren1c, Ren1d, Rn-1, Rnr
Quantity:	0.1 mg
Concentration:	0.25 mg/ml (determined by absorbance at 280nm)
Background:	REN1, also known as Renin-1, is a member of the peptidase A1 family. It is synthesized by the juxtaglomerular cells of the kidney in response to decreased blood pressure and sodium concentration. Androgen and thyroid hormones influence levels of Renin-1 in mouse submandibular gland (SMG) primarily by regulating the amount of Renin-1 mRNA available for translation. This protein is to generate angiotensin I from angiotensinogen in the plasma, initiating a cascade of reactions that produce an elevation of blood pressure and increased sodium retention by the kidney. Also, REN1 was found to be co localized with the lysosomal marker, beta-glucuronidase, by double-fluorescent labeling. Recombinant mouse REN1, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.
Uniprot ID:	P06281
NCBI:	NP_112469
GenelD:	19701
Species:	Mouse
Source:	Insect cells
Format:	State: Liquid purified protein Purity: >95% by SDS - PAGE Buffer System: Phosphate Buffered Saline (pH 7.4) containing 10% glycerol. Endotoxin Level: < 1.0 EU per 1 microgram of protein (determined by LAL method)
Description:	AA Sequence: LPTRTATFER IPLKKMPSVR EILEERGVDM TRLSAEWGVF TKRPSLTNLT SPVVLITNYLN TQYYGEIGIG TPPQTFKVIF DTGSANLWVP STKCSRLYLA CGIHSLYESS DSSSYMEMGS DFTIHYGSGR VKGFLSQDSV TVGGITVTQT FGEVTEPLI PFMLAKFDGV LGMGFPAQAV GGVTPVFDHI LSQGVLKKEV FSVYYNRGSH LLGGEVVLGG SDPQHYQGNF HYVSISKTDS WQITMKVSV GSSTLLCEEG CAVVVDTGSS FISAPTSSLK LIMQALGAKE KRIEEYVNC SQVPTLPDIS FDLGGRAYTL SSTDYVLQYP NRRDKLCTLA LHAMDIPPPT GPVWVLGATF IRKFYTEFDR HNNRIGFALA RHHHHHH Molecular weight: 42.5 kDa (387aa)
Storage:	Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
General Readings:	Ramkumar N., et al. (2013) Am. J. Hypertens. 26(8):965-972. Bandulik S., et al. (2013) Endocrinology 154(8):2712-2722.

Pictures:

