Recombinant mouse Renin protein

Catalog Number: ATGP3224

PRODUCT INFORMATION

Expression system
Baculovirus

Domain
22-402aa

UniProt No.
P06281

NCBI Accession No.
NP_112469

Alternative Names
Ren1, Ren, Ren-A, Ren1c, Ren1d, Rn-1, Rnr, Angiotensinogenase, Kidney renin

PRODUCT SPECIFICATION

Molecular Weight
42.5 kDa (387aa)

Concentration
0.25mg/ml (determined by absorbance at 280nm)

Formulation
Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity
> 95% by SDS-PAGE

Endotoxin level
< 1 EU per 1ug of protein (determined by LAL method)

Tag
His-Tag

Application
SDS-PAGE

Storage Condition
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description
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

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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.

Amino acid Sequence

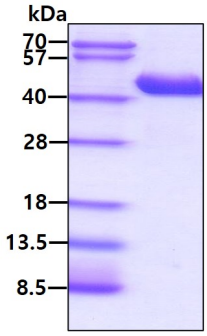
LPTRTATFER IPLKKMPSVR EILEERGVDM TRLSAEWGVF TKRPSLTNLT SPVVLTNYLN TQYYGEIGIG TPPQTFKVIF DTGSANLWVP STKCSRLYLA CGIHSLYESS DSSSYMENGS DFTIHYGSGR VKGFLSQDSV TVGGITVTQT FGEVTELPLI PFMLAKFDGV LGMGFPAQAV GGVTPVFDHI LSQGVLKEEV FSVYYNRGSH LLGGEVVLGG SDPQHYQGNF HYVSISKTDS WQITMKGVSV GSSTLLCEEG CAVVVDTGSS FISAPTSSLK LIMQALGAKE KRIEEYVVNC SQVPTLPDIS FDLGGRAYTL SSTDYVLQYP NRRDKLCTLA LHAMDIPPPT GPVWVLGATF IRKFYTEFDR HNNRIGFALA R<HHHHHH>

General References

Ramkumar N., et al. (2013) Am. J. Hypertens. 26(8):965-972.
Bandulik S., et al. (2013) Endocrinology 154(8):2712-2722.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.