

Renin-1, 22-402aa, Mouse, His tag, Insect cell

Cat.NO.: TP03713

3th Edition

Synonyms:Ren1, Ren, Ren-A, Ren1c, Ren1d, Rn-1, Rnr, Angiotensinogenase, Kidney renin

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 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.

Form:Liquid. In Phosphate Buffered Saline (pH 7.4) containing 10% glycerol.

Molecular Weight:42.5kDa (387aa) 40-57KDa (SDS-PAGE under reducing conditions.)

Sequences:

LPTRTATFERIPLKMKPSVREILEERGVDMTRLSAEWGVFTKRPSLTNLTSPVVLNTQYYGEIGIGTPPQTFKVI
FDTGSANLWVPSTKCSRLYLACGIHSLYESSDSSSYMENGSDFTIHYGSGRVKGFSLQDSVTVGGITVTQTFGEVT
ELPLIPFMLAKFDGVLGMGFPAQAVGGVTPVFDHILSQGVLKEEVFSVYYNRGSHLLGGEVVLGGSDPQHYQGNF
HYVSISKTDQITMKGVS VGSSTLLCEECAVVVDTGSSFISAPTSSLKLMQALGAKEKRIEYV VVNCVPTLPD
ISFDLGGGRAYTLSSDYVLQYPNRRDKLCTLALHAMDIPPTGPVWVLGATFIRKFYTEFDRHNNRIGFALARHHHH
HH

Purity:> 95% by HPLC

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

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.