Product information

Renin-1, 22-402aa

Mouse, His-tagged, Recombinant, Insect cell

Cat. No. IBATGP3224

NCBI Accession No.: NP_112469

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.

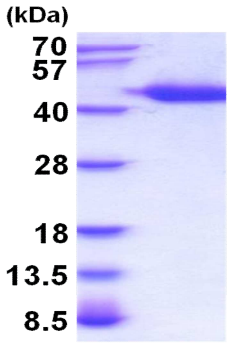
Molecular Weight: 42.5kDa (387aa)
40-57KDa (SDS–PAGE under reducing conditions.)

Predicted N terminal: Leu22

Purity: > 95% by SDS – PAGE.

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

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



15% SDS-PAGE (3ug)

Sequences of amino acids:

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 RHHHHHH

For research use only. This product is not intended or approved for human, diagnostics or veterinary use.

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General references:

Ramkumar N., *et al*. (2013) *Am. J. Hypertens.* 26(8):965-972.

Bandulik S., *et al*. (2013) *Endocrinology* 154(8):2712-2722.

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.

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