

Recombinant Human renin, His-tagged

Cat. No. REN-223H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	REN, 67-406aa, Human, His tag, E.coli
Species	Human
Source	E.coli
ProteinLength	67-406 a.a.
Description	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. Recombinant human REN protein, fused to His-tag at N-terminus, was expressed in E.coli.
Form	Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 0.4M urea, 10% glycerol
Molecular Mass	39.9kDa (365aa)
AA Sequence	MGSSHHHHHH SSGLVPRGSH MGSHTMLGN TTSSVILTN MDTQYYGEIG IGTPPQTFKV VFDTGSSNVW VPSSKCSRLY TACVYHKLFD ASDSSSYKHN

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GTELTLYST GTVSGFLSQD IITVGGITVT QMFGEVTEMP ALPFMLAEFD
 GVVGMGFIEQ AIGRVTPIFD NIISQGVLE DVFSFYNNRD SENSQSLGGQ
 IVLGGSDPQH YEGNFHYINL IKTGVWQIQM KGVSVGSSTL LCEDGCLALV
 DTGASYISGS TSSIEKLMEA LGAKKRLFDY VVKCNEGPTL PDISFHLGGK
 EYTLTSADYV FQESYSSKKL CTLAIHAMDI PPPTGPTWAL GATFIRKFYT
 EFDRRNNRIG FALAR

Purity >80% by SDS - PAGE

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

Concentration 1 mg/ml (determined by Bradford assay)

GENE INFORMATION

Gene Name REN renin [Homo sapiens]

Official Symbol REN

Synonyms REN; renin; angiotensinogenase; renin precursor, renal; angiotensin-forming enzyme; HNFJ2; FLJ10761;

Gene ID 5972

mRNA Refseq NM_000537

Protein Refseq NP_000528

MIM 179820

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UniProt ID	P00797
Chromosome Location	1q32
Pathway	ACE Inhibitor Pathway, organism-specific biosystem; Renin-angiotensin system, organism-specific biosystem; Renin-angiotensin system, conserved biosystem;
Function	aspartic-type endopeptidase activity; insulin-like growth factor receptor binding; peptidase activity; receptor binding;

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