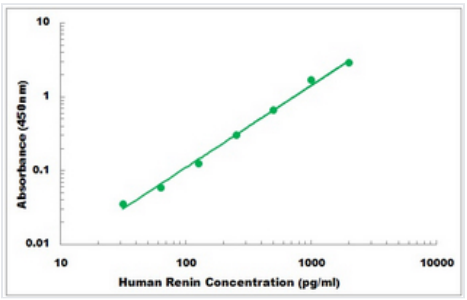
Renin (REN) ELISA Kit for Human

PRODUCT OVERVIEW

Product Name	Renin, ELISA Kit
Full Product Name	Human Renin ELISA Kit
Product Gene Name	REN elisa kit
Product Synonym Names	Renin; Angiotensinogenase
Species Reactivity	Human
Assay Type	Sandwich
Samples	Cell Culture Supernatants, Serum, Plasma, Urine
Detection Range	31.2 pg/ml - 2000 pg/ml
Sensitivity	10 pg/ml
Preparation and Storage	Shipped and store at 4 degree C for 6 months, store at -20 degree C for one year. Avoid freeze/thaw cycles.
Molecular Weight	44,726 Da
OMIM	phenotype 613092
3D Structure	ModBase 3D Structure for P00797
Detection Method	Colorimetric
Applications Tested/Suitable for REN elisa kit	Sandwich ELISA (SE)
Related Product Information for REN elisa kit	Sandwich ELISA for quantitative detection of Human Renin concentrations.
Other Notes	Small volumes of REN elisa kit vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for REN purchase	MBS824970 is a ready-to-use microwell, strip-or-full plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Renin, ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing REN. The ELISA analytical biochemical technique of the MBS824970 kit is based on REN antibody-REN antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect REN antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, REN. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%).



Typical Testing Data/Standard Curve (for reference only) of REN elisa kit

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for REN. It may not necessarily be applicable to this product.

NCBI GI #	4506475
NCBI GeneID	5972
NCBI Accession #	NP_000528.1
UniProt Primary Accession #	P00797
UniProt Secondary Accession #	Q6FI38; Q6T5C2
UniProt Related Accession #	P00797
GenBank Nucleotide #	NM_000537.3
NCBI Official Full Name	renin preproprotein
NCBI Official Synonym Full Names	renin
NCBI Official Symbol	REN
NCBI Official Synonym Symbols	HNFJ2
UniProt Protein Name	Renin
UniProt Synonym Protein Names	Angiotensinogenase
Protein Family	Protein
UniProt Gene Name	REN
UniProt Entry Name	RENI_HUMAN
NCBI Protein Information	renin; angiotensinogenase; renin precursor, renal; angiotensin-forming enzyme
NCBI Summary for REN	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. [provided by RefSeq, Jul 2008]
UniProt Comments for REN	REN: Renin is a highly specific endopeptidase, whose only known function 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. Interacts with ATP6AP2. Interaction with ATP6AP2 results in a 5-fold increased efficiency in angiotensinogen processing. Belongs to the peptidase A1 family. 2 isoforms of the human protein are produced by alternative splicing. Protein type: Protease; EC 3.4.23.15; Secreted, signal peptide; Secreted Chromosomal Location of Human Ortholog: 1q32 Cellular Component: extracellular space; cytoplasm; plasma membrane; extracellular region Molecular Function: peptidase activity; insulin-like growth factor receptor binding; aspartic-type endopeptidase activity; receptor binding Biological Process: response to cAMP; hormone-mediated signaling; cell maturation; drinking behavior; renin-angiotensin regulation of aldosterone production; male gonad development; response to lipopolysaccharide; proteolysis; angiotensin maturation; cellular protein metabolic process; regulation of blood pressure; regulation of MAPKKK cascade; beta-amyloid metabolic process; mesonephros development; kidney development Disease: Renal Tubular Dysgenesis; Hyperuricemic Nephropathy, Familial Juvenile, 2

Research Articles on REN	**1.** We sho a gender-dependent association of the renin rs6693954 SNP with central and ambulatory BP in patients with type 2 diabetes mellitus.
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