

Recombinant Human Renin/REN protein (His tag)

Catalog No. PKSH031332

Note: Centrifuge before opening to ensure complete recovery of vial contents.

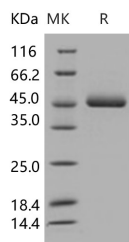
Description

Synonyms	Renin, Angiotensinogenase, REN, Angiotensin-forming enzyme
Species	Human
Expression Host	HEK293 Cells
Sequence	Met1-Arg406
Accession	P00797
Calculated Molecular Weight	43.7 kDa
Observed molecular weight	50 kDa
Tag	C-His
Bioactivity	Testing in progress

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	Please contact us for more information.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Renin is a member of the aspartyl proteinase family produced largely in part by the juxtaglomerular cells in the kidney. Renin is produced as prorenin with 43 pro residues at the N-terminal of mature Renin. The inactive prorenin becomes

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activated proteolytically by trypsin, cathepsin B, or other proteinases. Renin also has a very high selectivity for substrates due to a long peptide recognition on either side of the peptide bond undergoing cleavage. An octapeptide substrate was the minimum length to be cleaved by Renin. Renin plays a crucial role in the regulation of blood pressure and salt balance through the cleavage of angiotensinogen, which is the only known physiological substrate of Renin. Renin releases the decapeptide angiotensin I, which in turn is further converted to vasoactive hormone angiotensin II by angiotensin converting enzyme (ACE).