Human Renin (His-Tag) Recombinant Protein

Cat #: BGT-PPT-09061

Size: 10ug 50ug 500ug 1mg

Storage: Lyophilized protein should be stored at ≤ -20°C, stable for one year after receipt.

Reconstituted protein solution can be stored at 2-8°C for 2-7 days.

Aliquots of reconstituted samples are stable at ≤ -20°C for 3 months.

Shipping: The product is shipped at ambient temperature.

Upon receipt, store it immediately at the temperature listed below.

Synonyms: Renin; Angiotensinogenase; REN

Product Information

Source: Human Cells

Description: Recombinant Human Renin is produced by our Mammalian expression system and the target gene encoding Leu24-Arg406 is expressed with a 10His tag at the Cterminus.

Accession: P00797

Predicted Mol Mass: 44 KDa

Apparent Mol Mass: 43-50 KDa, reducing conditions

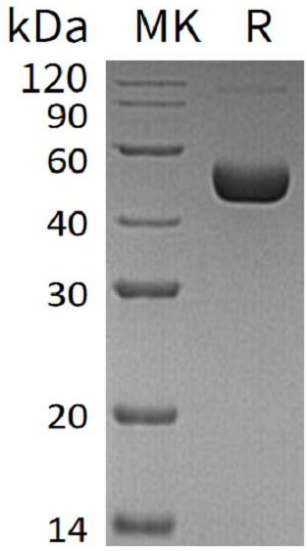
Activity: Measured by its ability to cleave a fluorogenic peptide substrate, Arg-Glu(EDANS)-Ile-His-Pro-Phe-His-Pro-Phe-His-Leu-ValIle-His-Thr-Lys(dabcyl)-Arg(Sigma,Catalog #R8276). The specific activity is 51 pmol/min/μg, as measured under the described conditions.(Regularly tested)

Endotoxin: < 1 EU/μg as determined by LAL test.

Formulation: Lyophilized from a 0.2 μm filtered solution of 20mM PB, 8% Sucrose, 5% Mannitol, 0.05% Tween80, 100mM NaCl, pH 7.4.

Reconstitution: Always centrifuge tubes before opening.Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100μg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

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 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).



Note:

The product listed herein is for research use only and is not intended for use in human or clinical diagnosis.