

32-8965: Recombinant Human Renin (C-10His)

Gene : REN
Gene ID : 5972
Uniprot ID : P00797

Description

Source: Human Cells.
MW :44kD.

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 C-terminus. 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).

Product Info

Amount : 10 µg / 50 µg
Content : Lyophilized from a 0.2 µm filtered solution of PBS, pH7.4.
Storage condition : Lyophilized protein should be stored at -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at -20°C for 3 months.
Amino Acid : LPTDTTTFKRIFLKRMPISRESLKERGVDMARLGPWEWSQPMKRLTLGNTTSSVILTNYMDTQYYGEIGIGTPPQTF
KVVFDTGSSNVVWVPSKCSRLYTACVYHKLFDASDSSSYKHNGTELTRYSTGTVSGFLSQDIITVGGITVTQM
FGEVTEMPALPFMLAEFDGVVGMGFIEQAIGRVTPIFDNIISQGVKEDVFSFYNNRDESENSQLGGQIVLGGSD
PQHYEGNFHYINLIKTVWQIQMKGVS VGSSTLLCEDGCLALVDTGASYISGSTSSIEKLMEALGAKKRLFDYV
KCNEGPTLPDISFHLGGKEYTLTSADYVFQESYSSKKLCTLAIHAMDIPPTGPTWALGATFIRKFYTEFDRRNNR
IGFALARGGGGSHHHHHHHHHH

Application Note

Endotoxin : Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.