Creative Enzymes®

Renin from Human, Recombinant

Cat. No. NATE-1951

Lot. No. (See product label)

Introduction

Description	Renin, also known as an angiotensinogenase, is an enzyme that participates in the body's renin-angiotensin aldosterone system (RAAS)—also known as the renin-angiotensin-aldosterone axis—that mediates extracellular volume (i.e., that of the blood plasma, lymph and interstitial fluid), and arterial vasoconstriction. Thus, it regulates the body's mean arterial blood pressure. Renin is often improperly referred to as a hormone even though it has no peripheral receptors and rather has an enzymatic activity with which it hydrolyses angiotensinogen to angiotensin I.
Synonyms	REN; HNFJ2; Renin; angiotensinogenase; Angiotensin forming enzyme

Product Information

Species	Human
Source	HEK cells, Mature Renin (aa 67-406) is fused at the N-terminus to a FLAG-tag. Active form, does not contain prorenin peptide (aa 1-66).
Form	Lyophilized. In 25mM MES buffer containing 150mM NaCl.
EC Number	EC 3.4.23.15
CAS No.	9015-94-5
Molecular Weight	~52kDa (predicted is 38.3 kDa)
Purity	>90%
Activity	>30U/mg
Concentration	0.1 mg/ml when reconstituted as suggested.
Endotoxin Level	<0.1EU/μg protein (LAL test)
Unit Definition	1 unit is defined as the amount of enzyme that cleaves 1 pmole of the fluorogenic peptide substrate, Arg-Glu(EDANS)-Ile-His-Pro-Phe-His-Pro-Phe-His-Leu-Val-Ile-His-Thr-Lys(dabcyl)-Arg.

Usage and Packaging

Preparation Instructions	Reconstitute in 100μl deionized H2O for a final concentration of 0.1mg/ml.

Storage and Shipping Information

Storage	at -20°C
Stability	Avoid freeze/thaw cycles. After reconstitution, prepare aliquots and store at -80°C.