

Product Datasheet



Product Description

Product:	Human Prorenin, Native
Catalog Number:	IHPREN
Description:	<p>Recombinantly produced in HEK cell culture as untagged native form prorenin and purified by affinity chromatography. Fully activatable to renin by catalytic amounts of trypsin. Prorenin is a glycosylated aspartic protease that consists of 2 homologous lobes and is the precursor of renin. Prorenin exhibits a low level of enzymatic activity relative to renin which is generated from prorenin by proteolytic cleavage of the first ~43 amino acids at the N-terminus. This so called prosegment appears to block the full enzymatic potential of the active site (1). Renin activates the renin-angiotensin system by cleaving angiotensinogen, produced by the liver, to yield angiotensin I, which is further converted into angiotensin II by ACE, the angiotensin-converting enzyme primarily within the capillaries of the lungs. It has been reported that the levels of circulating prorenin (but not renin) are increased in diabetic subjects(2).</p> <p>1) A.H. Jan Danser; Jaap Deinum ; Renin, Prorenin and the Putative (Pro)renin Receptor). Hypertension. 2005;46:1069.</p> <p>2) Luetscher JA, Kraemer FB, Wilson DM, Schwartz HC, Bryer-Ash M. Increased plasma inactive renin in diabetes mellitus. A marker of microvascular complications. N Engl J Med. 1985;312:1412?1417.</p>
Recommended Storage:	-70 C
Shipping Conditions:	Dry ice
Minimum Shelf Life:	3 years from delivery

Technical Information

Purity:	>95% by SDS-PAGE analysis
Source:	Human Embryonic Kidney cells
Molecular Weight:	43,725
Extinction Coefficient:	1.1

Sample Characteristics

Lot Number:	IHPREN-111
Aliquot:	1 x 0.1 mg
Concentration:	0.7 mg/ml

Volume: 0.143 ml
Buffer: 0.05M Tris-HCl; 0.15M NaCl; pH 8.0
Form: Frozen liquid

For In Vitro laboratory use only

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