Product Datasheet



Product Description

Product: Human Prorenin, C-terminal 8x His tag

Catalog Number: IHPREN-HIS

Description: Recombinantly produced in HEK cell culture and purified by chelated metal

affinity chromatography. Contains a 8X-Histidine tag at C terminus for purification. 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 reninangiotensin 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).

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1) A.H. Jan Danser; Jaap Deinum; Renin, Prorenin and the Putative (Pro)renin

Receptor). Hypertension. 2005;46:1069.

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.

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-HIS-SAMPLE

 Aliquot:
 1 x 1.0 mg

 Concentration:
 1.0 mg/ml

 Volume:
 1.0 ml

Buffer: 50mM Tris; pH 8.0 **Form:** Frozen liquid

For In Vitro laboratory use only

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