

Product Datasheet



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

Catalog Number: IDPREN-HIS

Lot Number: 209

Description: Recombinantly produced in HEK cell culture and purified by chelated metal affinity chromatography. Contains a 8X-Histidine tag at C terminus for purification. Resistant to activation to renin by trypsin digestion. 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).

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.

Aliquot: 1 x 0.1 mg

Concentration: 1.7 mg/ml

Volume: 0.058 ml

Molecular Weight: 41,711

Buffer: 50 mM Tris; pH 8.0

Storage: -70 C

Form: Frozen liquid

Source:

Human Embryonic Kidney cells

For In Vitro laboratory use only

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