



## Certificate of Analysis

### Product Description

**Product:** Mouse Prorenin, C-terminal 8x His tag

**Catalog Number:** IMPREN-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. 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.

**Source:** Human Embryonic Kidney cells

**Molecular Weight:** 41,711

### Sample Characteristics

**Lot Number:** SAMPLE

**Aliquot:** 1 x 1.0 mg

**Concentration:** 1.0 mg/ml

**Volume:** 1.0 ml

**Buffer:** 50 mM Tris; pH 8.0

**Form:** Frozen liquid

### Shipping Information

**Recommended** -70 C



**Storage:**

**Shipping**  
**Conditions:** Dry ice

**Minimum Shelf**  
**Life:** 3 years from delivery

For In Vitro laboratory use only

This material is intended for research use or for further manufacture of in-vitro diagnostic products licensed under Sec. 351 of the PHS Act. User agrees to indemnify and hold Innovative Research harmless for any use of this product other than that specifically stated.

**CAUTION TO USERS:** The values expressed in the attached Certificate of Analysis represent best efforts to provide accurate and reproducible data about the material. However, test methods and techniques for biologicals may produce variable results.