

**Product Specification Sheet**

Native Human Prorenin  
Product Number: RN33  
Aliquot: 0.1 mg  
Lot Number: rn33.912  
Storage: -70°C

<b>DESCRIPTION:</b>	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 <sup>1</sup> . 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 <sup>2</sup> .
<b>CONCENTRATION:</b>	0.8 mg/mL
<b>SOURCE:</b>	Human Embryonic Kidney Cells
<b>STORAGE BUFFER:</b>	0.05M Tris-HCl; 0.15M NaCl; pH 8.0
<b>STORAGE:</b>	-70°C. Frozen liquid. Avoid freeze/thaw cycles!
<b>PURITY:</b>	>95% by SDS-PAGE analysis
<b>REFERENCES:</b>	<ol style="list-style-type: none"><li>1. A.H. Jan Danser; Jaap Deinum ; (2005) Hypertension <b>46</b>:1069</li><li>2. Luetscher JA, Kraemer FB, Wilson DM, Schwartz HC, Bryer-Ash M.; (1985) N Engl J Med <b>312</b>:1412-1417</li></ol>