



CERTIFICATE OF ANALYSIS

PRODUCT NAME:	Prorenin Human (r-Prorenin)
CAT. NO:	I510-11PR
FORM:	Liquid in 50 mM Tris pH 8.0
MOLECULAR WEIGHT:	45kd
PURITY:	> 99% Pure by SDS Page: crystallographic grade
SOURCE:	HEK Cells-Recombinant
STORAGE:	-20C

Human Prorenin study: Prorenin is the inactive precursor of renin, which is a key enzyme in the regulation of blood pressure and electrolyte balance. In renal juxtaglomerular cells, sequential cleavage of the N-terminal 20 and 46 amino acids of preprorenin produces prorenin and active renin, respectively. Human Prorenin REF: Journal of Protein Chemistry 9(6) 663-672 (1990)/prorenin.

Human prorenin study: Prorenin Levels in Retinopathy of Prematurity. Human prorenin ref: American Journal of Ophthalmology, Volume 143, Issue 3, March 2007, Pages 531-533/prorenin

recombinant human prorenin research: Using pure recombinant human prorenin as a substrate, we have identified an enzyme in human kidney that accurately processes prorenin to active renin. recombinant human prorenin REF: Proc Natl Acad Sci U S A. 1990 March; 87(5): 1927-1931/prorenin

Human prorenin study: Abnormal prorenin processing in growth hormone deficiency. Human prorenin ref: Growth Hormone & IGF Research, Volume 15, Issue 4, August 2005, Pages 251-255/prorenin

Human Prorenin (pro-renin) Research:

Although the prorenin does not contain renin, prorenin does display a low level (<5%) of renin activity that is intrinsic to the zymogena. Human Prorenin ref: Heinrikson R. L. et al. (1989) Amer. Jour. Hyperten. 2:367-380/prorenin

Human prorenin study: Human Prorenin: Human Renin is synthesized as an enzymatically inactive prorenin, which is split by limited proteolysis to give the active renin enzyme. Both human renin and human prorenin is secreted by the kidney(s). Circulating human renin concentrations are occasionally raised in nephroblastoma. Human Prorenin Ref: Plasma Renin activity in Wilms Tumor. 1971,67:197-202/prorenin.