



CERTIFICATE OF ANALYSIS

PRODUCT NAME:	RENIN Human
ACTIVITY:	Typically >1 u/ml based on the PRA Assay
CAT. NO:	I510-11
EC NO:	3.4.23.15
EXPIRATION:	1 year
FORM:	Liquid
MOLECULAR WEIGHT:	40,000
PROTEIN:	Typically >0.1 mg Protein/ml by Lowry
PURITY:	> 90% by NuPAGE gel, 12% Bis-Tris
SOURCE:	Human Kidney
STORAGE:	2-8 C

What is Human Renin?

Human Renin, also known as angiotensinogenase, is a circulating enzyme released mainly by juxtaglomerular cells in the JGA of the kidneys in response to low blood volume or low body NaCl content, mediated through the release of prostaglandins. Although human Renin has hormone-like actions, human Renin cleaves a protein precursor in the circulation rather than working on a cellular target.

Human Renin is an important enzyme in the regulation of blood pressure and electrolyte homeostasis and therefore is of great clinical importance. Kinetic and mechanistic functions of human Renin are of importance for the development of hypertension drugs. Plasma renin activity (PRA) is measured as part of the diagnosis and treatment of hypertension.

Human Renin acts as a proteolytic enzyme of the kidney by releasing angiotensin which has a vasoconstrictive action which results in a higher blood pressure. Early detection of Human renin level increases related to a blood pressure increase have shown in research to provide vital prognostic and diagnostic guidelines for evaluating possible surgical treatment especially in renovascular involvement.