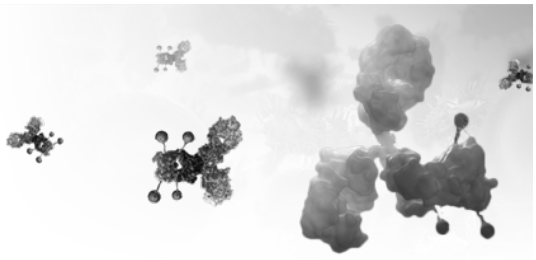

Human Renin [His] (DAG364)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	RecombinantHuman Renin contains a 8X-Histidine tag at C-terminus and has a totalmolecular weight of 43,725 Da, was expressed in HEK cells, which is fullyactivatable by catalytic amounts of trypsin.
Antigen Description	Reninalso known as an angiotensinogenase, is an enzyme that participates in thebody"s renin-angiotensin system (RAS) -- also known as theRenin-Angiotensin-Aldosterone Axis -- that mediates extracellular volume(i.e., that of the blood plasma, lymph and interstitial fluid), and arterialvasoconstriction. Thus, it regulates the body"s mean arterial blood pressure.
Species	Human
Conjugate	His
Applications	Specificmethodologies have not been tested using this product.
Format	Purified, Liquid
Concentration	Lot specific(OD280nm, E0.1% = 1.09)
Buffer	50mMTris, pH 8.0
Preservative	None
Storage	2-8°C short term, -20°C long term

BACKGROUND

Introduction	Renin is an enzyme that participates in the body's renin-angiotensin system (RAS) that mediates extracellular volume and arterial vasoconstriction. It regulates blood pressure and electrolyte homoeostasis. Angiotensin II constricts blood vessels leading to increased blood pressure. It also increases the secretion of ADH and aldosterone, and stimulates the

45-1 Ramsey Road, Shirley, NY 11967, USA
Email: info@creative-diagnostics.com
Tel: 1-631-624-4882 Fax: 1-631-938-8221

	hypothalamus to activate the thirst reflex. An over-active renin-angiotension system leads to vasoconstriction and retention of sodium and water. Renin has been identified to be an attractive target for the treatment of hypertension. The Amplite Renin Assay Kit provides a convenient assay for high throughput screening of renin inhibitors and renin activity using our proprietary Tide Fluor 3 (TF3)/Tide Quencher 3 (TQ3) fluorescence resonance energy transfer (FRET) peptide. In the FRET peptide, the fluorescence of TF3 is quenched by TQ3. Upon cleavage into two separate fragments by renin, the fluorescence of TF3 is recovered, and the fluorescent signal can be easily monitored by a fluorescence microplate reader at Ex/Em = 540/590 nm. This assay is about fifty fold more sensitive than an EDANS/DABCYL-based assay. With the Amplite Renin Assay Kit, we have detected as little as 1ng renin in a 100 L reaction volume.
Keywords	REN; renin; HNFJ2; angiotensinogenase; renin precursor, renal; angiotensin-forming enzyme

45-1 Ramsey Road, Shirley, NY 11967, USA
Email: info@creative-diagnostics.com
Tel: 1-631-624-4882 Fax: 1-631-938-8221