

# Rat Renin Activity Fluorometric Assay Kit

Cat. No. Kit-0763 Lot. No. (See product label)

## SPECIFICATION

**Product Overview** Rapid, simple & convenient  
The assay can detect rat renin activity as low as 0.12 mU recombinant rat renin.

**Description** Renin (EC 3.4.23.15), also known as angiotensinogenase, is an enzyme that participates in the renin-angiotensin system (RAS) which mediates extracellular volume (i.e. blood plasma, lymph and interstitial fluid), and arterial vasoconstriction. In addition to the systemic RAS, locally expressed RAS has been found in the kidney, heart and nervous system. An overactive renin-angiotensin system leads to vasoconstriction and retention of sodium and water, causing hypertension. Renin inhibitors are widely used for the treatment of hypertension. In Rat Renin Activity Assay Kit, Rat Renin and other proteases hydrolyze a FRET substrate resulting in fluorescence at Ex/Em = 328/552 nm. In the presence of a Rat Renin-Specific Inhibitor, hydrolysis of the substrate is due to only the activity of other proteases. The difference between the total activity and the activity in the presence of Rat Renin-Specific Inhibitor gives the Rat Renin Activity in the sample. This rapid, simple & sensitive kit can detect renin activity as low as 0.12 mU recombinant rat renin.

**Applications** Detects Rat Renin Activity

**Usage** For Research Use Only! Not For Use in Humans.

**Storage** -20°C

**Size** 100 assays

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<b>Kit Components</b>	<ul style="list-style-type: none"><li>• Renin Assay Buffer</li><li>• Homogenization Buffer</li><li>• Rat Renin Substrate</li><li>• Rat Renin (Lyophilized)</li><li>• Rat Renin Inhibitor (Lyophilized)</li><li>• EDANS Standard (100 <math>\mu</math>M)</li></ul>
<b>Detection method</b>	Fluorescence (Ex/Em = 328/552 nm)
<b>Compatible Sample Types</b>	<ul style="list-style-type: none"><li>• Crude extracts and purified Recombinant protein</li><li>• Tissue lysate</li></ul>

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