Product Information Sheet

Product Name: Mouse Prorenin, recombinant
Catalog Number: 72174
Size: 20μg
Concentration: 0.5mg/ml
Activity (Unit/μg): Provided on the label
Unit definition: One unit of protease hydrolyzes 1 picomole of mouse renin FRET substrate 5-FAM/QXL™ 520 per minute at pH 7.5 at 25° C.
Storage: Store at -80°C. Avoid multiple thaw-freeze cycles.

Instruction:

The renin–angiotensin system (RAS) plays a central role in the regulation of blood pressure and electrolyte homoeostasis\(^1\). An overactive renin-angiotensin system leads to hypertension. As a result, renin is an attractive target for the treatment of this disease\(^2-4\).

Recombinant mouse prorenin is produced in HEK cells and purified by chelated metal affinity chromatography. It contains an 8x-Histidine tag at the C terminus. The apparent \(M_r\) of recombinant enzyme on SDS-PAGE is 41.7 kDa. Prorenin, the precursor of renin, is a glycosylated aspartic protease that consists of 2 homologous lobes. Prorenin can be activated with trypsin. Its activity can be measured in a FRET-based enzymatic assay (AnaSpec Cat#72161). 50-100 ng of enzyme is sufficient for FRET-based assay.

Enzyme is stored in 50mM Tris, pH 8.0.

References