Catalog Number: 502823

## General Information

## Gene Name Synonym

Angiotensinogenase; Kidney renin

## Protein Construction

A DNA sequence encoding the pro form of mouse REN1 (NP_112469.1) (Met 1-Arg 402) was fused with a polyhistidine tag at the C-terminus.

## Organism

Mouse

## Expression Host

Human Cells

## QC Testing

## Activity

1. Measured by its ability to cleave the fluorogenic peptide substrate 5FAM/QXL ${ }^{\mathrm{TM}} 520$ (PetiPeterdi, J. et al., 2009, Physiology 24:88.). The specific activity is $>20$ pmoles $/ \mathrm{min} / \mu \mathrm{g}$.
2. Immobilized mouse REN1-His (Cat: 502823) at $10 \mathrm{ug} / \mathrm{ml}(100 \mu \mathrm{l} / \mathrm{well})$ can bind biotinylated human AGT-His (Cat: 501652) with a linear range of $31.25-250 \mathrm{ng} / \mathrm{ml}$.

## Purity

$>97 \%$ as determined by SDS-PAGE

## Endotoxin

$<1.0 \mathrm{EU}$ per $\mu \mathrm{g}$ of the protein as determined by the LAL method

## Stability

Samples are stable for up to twelve months from date of receipt at $-70^{\circ} \mathrm{C}$

## Predicted N terminal

Leu 22

## Molecular Mass

The recombinant mouse REN1 consists of 392 amino acids and has a predicted molecular mass of 43.2 kDa . As a result of glycosylation, the apparent molecular mass of rmREN1 is approximately 48-55 kDa in SDS-PAGE under reducing conditions.

## Formulation

Lyophilized from sterile PBS, pH 7.4

1. $5 \%$ trehalose and mannitol are added as protectants before lyophilization.
2. Please contact us for any concerns or special requirements.

## Usage Guide

## Storage

Store it under sterile conditions at $-20^{\circ} \mathrm{C}$ to $-80^{\circ} \mathrm{C}$. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

## Reconstitution

Adding sterile water, prepare a stock solution of $0.25 \mathrm{mg} / \mathrm{ml}$. Concentration is measured by UV-Vis.

## SDS-PAGE



Mouse REN1 / Renin-1 Protein (His Tag) SDSPAGE

