abcam

Product datasheet

# Recombinant human Renin protein ab285713

2 Images

## Description

| | |
|---|---|
| **Product name** | Recombinant human Renin protein |
| **Biological activity** | The specific activity is > 2 U/mg. The specific activity of active Renin was assayed using a Renin Activity Fluorometric Assay Kit |
| **Purity** | >= 95 % SDS-PAGE. |
| **Expression system** | HEK 293 cells |
| **Accession** | P00797 |
| **Protein length** | Full length protein |
| **Animal free** | No |
| **Nature** | Recombinant |
| **Species** | Human |
| **Predicted molecular weight** | 43 kDa including tags |
| **Tags** | His tag C-Terminus |
| **Additional sequence information** | 8 x His tag |

## Specifications

Our **Abpromise guarantee** covers the use of **ab285713** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| | |
|---|---|
| **Applications** | SDS-PAGE<br>Functional Studies |
| **Form** | Lyophilized |
| **Additional notes** | This product is manufactured by BioVision, an Abcam company and was previously called 6300 Human CellExp™ Renin, Human Recombinant. 6300-50 is the same size as the 50 µg size of ab285713. |

## Preparation and Storage

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|---|---|
| **Stability and Storage** | Shipped at 4°C. Store at -20°C or -80°C. Avoid freeze / thaw cycle.<br>pH: 8.00 |

Constituents: 0.788% Tris HCl, 0.292% Sodium chloride, 5% Trehalose

This product is an active protein and may elicit a biological response in vivo, handle with caution.

**Reconstitution** Centrifuge the vial prior to opening. Reconstitute in sterile PBS (pH 7.4). Do not vortex.

## General Info

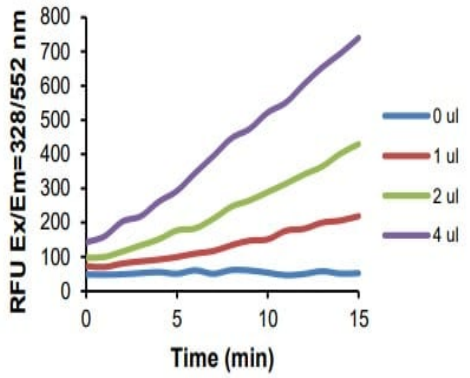
**Function** Renin is a highly specific endopeptidase, whose only known function is to generate angiotensin I from angiotensinogen in the plasma, initiating a cascade of reactions that produce an elevation of blood pressure and increased sodium retention by the kidney.

**Involvement in disease** Defects in REN are a cause of renal tubular dysgenesis (RTD) [MIM:267430]. RTD is an autosomal recessive severe disorder of renal tubular development characterized by persistent fetal anuria and perinatal death, probably due to pulmonary hypoplasia from early-onset oligohydramnios (the Potter phenotype).
Defects in REN are the cause of familial juvenile hyperuricemic nephropathy type 2 (HNFJ2) [MIM:613092]. It is a renal disease characterized by juvenile onset of hyperuricemia, slowly progressive renal failure and anemia.

**Sequence similarities** Belongs to the peptidase A1 family.

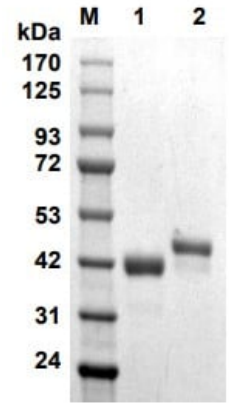
**Cellular localization** Secreted. Membrane. Associated to membranes via binding to ATP6AP2.

## Images




Functional Studies - Recombinant human Renin protein (ab285713)

Renin Enzyme activity: The specific activity of activated Renin is > 2 U/mg assayed by using a Renin Activity Fluorometric Assay Kit.
Renin concentration was 0.1mg/ml




SDS-PAGE - Recombinant human Renin protein (ab285713)

SDS-PAGE for ab285713 (4-20%) of active and pro Renin: 2 µg of the recombinant Renin and prorenin is loaded under reducing conditions and stained with Coomassie Blue.

Lane M: MW Marker

Lane 1: Active Renin

Lane 2: Prorenin.



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