# abcam

# Product datasheet

# Anti-Renin antibody [EPR6433] ab125012

Recombinant

RabMAb

## 4 Images

#### Overview

Product name Anti-Renin antibody [EPR6433]

**Description** Rabbit monoclonal [EPR6433] to Renin

Host species Rabbit

Tested applications Suitable for: Flow Cyt (Intra), WB

Unsuitable for: ICC/IF,IHC-P or IP

Species reactivity Reacts with: Human

Does not react with: Mouse, Rat

**Immunogen** Synthetic peptide within Human Renin aa 50-150. The exact sequence is proprietary.

Database link: P00797

Positive control K562, 293T, and HepG2 whole cell lysate (ab7900). K562 cells.

**General notes**This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

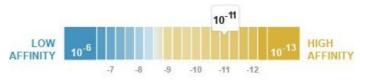
Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**<sup>®</sup> **patents**.

### **Properties**

Form Liquid

**Storage instructions** Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

**Dissociation constant (K<sub>D</sub>)**  $K_D = 1.70 \times 10^{-11} M$ 



Learn more about K<sub>D</sub>

Storage buffer

pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture

supernatant

Purity Protein A purified

ClonalityMonoclonalClone numberEPR6433

**Isotype** IgG

#### **Applications**

#### The Abpromise guarantee

Our Abpromise guarantee covers the use of ab125012 in the following tested applications.

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

Application	Abreviews	Notes
Flow Cyt (Intra)		1/10 - 1/100.  ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody
WB		1/1000 - 1/10000. Detects a band of approximately 47 kDa (predicted molecular weight: 45 kDa).

### **Application notes**

Is unsuitable for ICC/IF,IHC-P or IP.

#### **Target**

**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).

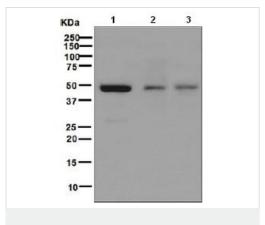
Defects in REN are the cause of familial juvenile hyperuricemic nephropathy type 2 (HNFJ2) [MIM:613092]. It is a renal disease characterized by juvenile onset of hyperuricemia, slowly

progressive renal failure and anemia.

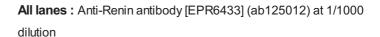
**Sequence similarities** Belongs to the peptidase A1 family.

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

#### **Images**



Western blot - Anti-Renin antibody [EPR6433] (ab125012)



Lane 1: K562 lysate

Lane 2: 293T (Human embryonic kidney epithelial cell) cell lysate

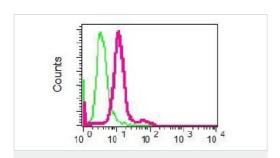
Lane 3: HepG2 cell lysate

Lysates/proteins at 10 µg per lane.

#### **Secondary**

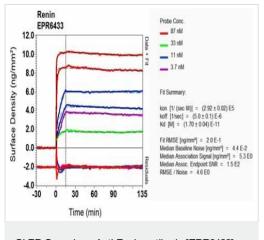
All lanes: HRP labelled goat anti-rabbit at 1/2000 dilution

**Predicted band size:** 45 kDa **Observed band size:** 47 kDa



Flow Cytometry (Intracellular) - Anti-Renin antibody [EPR6433] (ab125012)

Intracellular flow cytometric analysis of permeabilized K562 cells using ab125012 at 1/10 shown in red or a rabbit lgG negative control shown in green.



Ol-RD Scanning - Anti-Renin antibody [EPR6433] (ab125012)

Equilibrium disassociation constant ( $K_D$ )

Learn more about K<sub>D</sub>

#### Click here to learn more about K<sub>D</sub>



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