

Recombinant PRAS40 Monoclonal Antibody

catalog number: **AN301877L**

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

Description

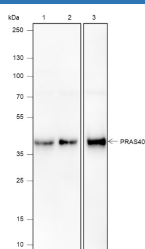
Reactivity	Human;Rat;Mouse
Immunogen	Recombinant human PRAS40 fragment
Host	Rabbit
Isotype	IgG, κ
Clone	C121499
Purification	Protein A purified
Buffer	PBS, 50% glycerol, 0.05% Proclin 300, 0.05% protein protectant.

Applications

Recommended Dilution

WB	1:500-1:1000
IHC	1:50-1:200

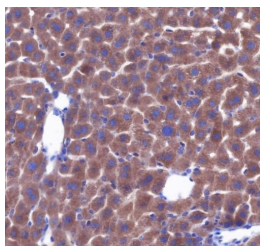
Data



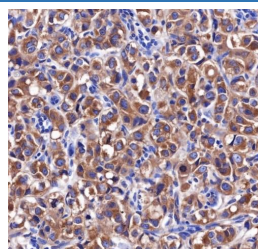
Western Blot with PRAS40 Monoclonal Antibody at dilution of 1:1000. Lane 1: MCF-7, Lane 2: HeLa, Lane 3: PC-12

Observed-MW:40 kDa

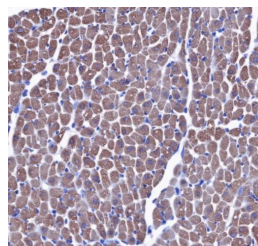
Calculated-MW:27 kDa



Immunohistochemistry of paraffin-embedded Mouse liver using PRAS40 Monoclonal Antibody at dilution of 1:200.



Immunohistochemistry of paraffin-embedded Human breast cancer using PRAS40 Monoclonal Antibody at dilution of 1:200.



Immunohistochemistry of paraffin-embedded Rat cardiac muscle using PRAS40 Monoclonal Antibody at dilution of 1:200.

Preparation & Storage

Storage	Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.
Shipping	Ice bag

Background

For Research Use Only

Toll-free: 1-888-852-8623
Web: www.elabscience.com

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Rev. V1.2

PRAS40 is a proline-rich protein with a molecular weight of 40 kDa that acts as a substrate for the serine / threonine kinase Akt. PRAS40 also binds mTOR to transduce Akt signals to the mTOR complex. Inhibition of mTOR signaling stimulates PRAS40 binding to mTOR, which in turn inhibits mTOR activity. PRAS40 interacts with raptor in mTOR complex 1 (mTORC1) in insulin-deprived cells and inhibits the activation of the mTORC1 pathway mediated by the cell cycle protein Rheb. Phosphorylation of PRAS40 by Akt at Thr246 relieves PRAS40 inhibition of mTORC1. mTORC1 in turn phosphorylates PRAS40 at Ser183.