

## PRAS40 [pT246] ABfinity™ Recombinant Rabbit Monoclonal Antibody – Purified

Publication Part no. MAN0004985

Rev. Date: 21 August 2011

Catalog Number: 701058

Store at 2–8°C

**Clonality:** Monoclonal  
**Concentration:** 0.5 mg/mL  
**Quantity:** 100 µg  
**Volume:** 200 µL

**Host/Class:** Rabbit IgG  
**Reactivity:** Human PRAS40  
**Predicted Reactivity:** Human

### Product Description

Proline Rich Akt Substrate of 40 kDa (PRAS40) is a signaling target known to play a regulatory role in growth, development, and apoptosis through the phosphoinositol kinase 3 pathway. PRAS40 also acts by binding to mTOR complex 1 and inhibiting mTOR function by altering nutrient balance, and growth maintenance. Phosphorylation of PRAS40 by mTORC1 at Serine 183, 212 and 221 residues disrupts this binding thus removing the inhibitory effect. Activated Akt phosphorylates PRAS40 on threonine 246. Mutation of PRAS40 threonine 246 has been shown to be apoptotic, and plays a role in abrogating neuronal protection.

### Product Specifications

**Immunogen:** Phosphopeptide corresponding to amino acids 241–251 of Human PRAS40

**Alternate Names:** AKT1S1

**Apparent MW:** ~40 kDa

**Gene ID:** 84335

**Protein Accession No.:** Q96B36

**Sequence Identity:** Human

**Sequence Homology:** Mouse, Rat, Monkey

**Clone/PAD:** 8H13L13

**Lot:** See product label

### Product Applications

Application	Species	Test Material	Concentration
Western blotting	Human	HepG2 cells	1–3 µg/mL
Indirect ELISA	Human	Phosphopeptide	1.5x10 <sup>-4</sup> to 3 µg/mL

### Storage and Handling

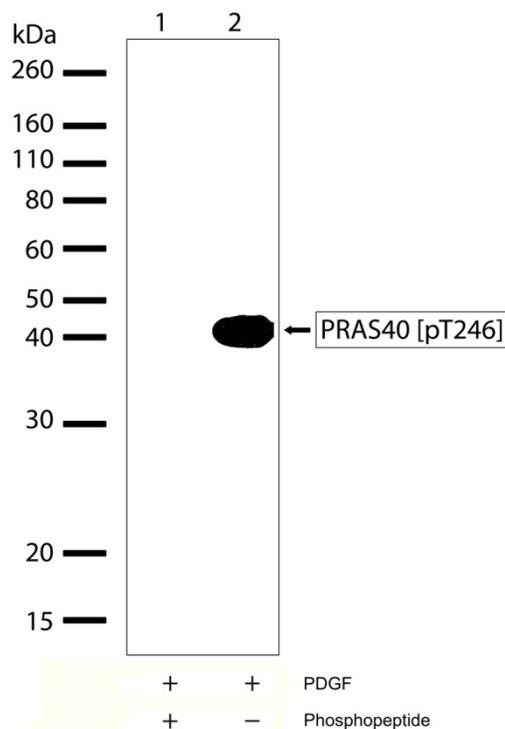
Store the antibody at 2–8°C for up to 1 month, or –20°C for long storage. Avoid repeated freezing and thawing.

### Stability

Expires one year from date of receipt when stored as instructed.

### Storage Buffer

Phosphate buffered saline (PBS) with 0.09% sodium azide.



**Figure 1** Western blot analysis of PRAS40 [pT246] ABfinity™ Recombinant Rabbit Monoclonal Antibody (Cat. no. 701058). Western blot analysis was performed on whole cell extracts of HepG2 cells treated with PDGF (100 ng/mL for 15 minutes lanes 1 and 2). A band corresponding to phosphorylated PRAS40 at ~40 kDa was detected using PRAS40 [pT246] ABfinity™ Recombinant Rabbit Monoclonal Antibody at a concentration of 2.5 µg/mL (lane 2). To confirm specificity, competition was performed with the phosphopeptide (lane 1).

**For research use only. Not for human or animal therapeutic or diagnostic use.**

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## Safety Data Sheets (SDS)

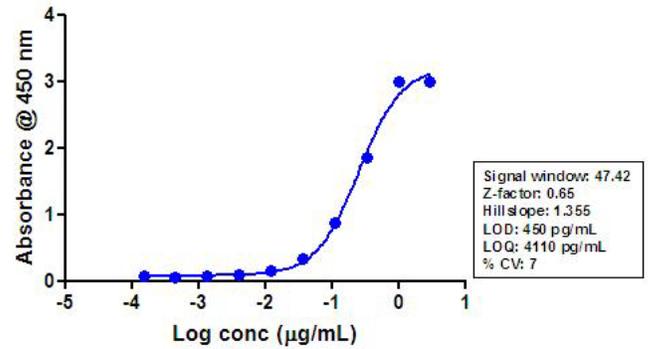
Safety Data Sheets (SDSs) are available at [www.invitrogen.com/sds](http://www.invitrogen.com/sds).

## Certificate of Analysis

The Certificate of Analysis provides detailed quality control and product qualification information for each product. Certificates of Analysis are available on our website. Go to [www.invitrogen.com/support](http://www.invitrogen.com/support) and search for the Certificate of Analysis by product lot number, which is printed on the box.

## Related Products

Product Name	Quantity	Catalog No.
iBlot® Dry Blotting System	1 unit	IB1001
WesternBreeze™ Chromogenic Kit Anti-Rabbit	1 kit	WB7105
WesternBreeze™ Chemiluminescent Kit, Anti-Rabbit	1 kit	WB7106
Goat anti-mouse (H+L), HRP conj.	1 mg	G21040
Goat anti-rabbit (H+L), HRP conj.	1 mg	G21234
Goat anti-mouse (H+L), AP conj.	1 mg	G21060
Goat anti-rabbit (H+L), AP conj.	1 mg	G21079
Nitrocellulose, 0.2 µm	20/pack	LC2000



**Figure 2** Indirect ELISA of PRAS40 [pT246] ABfinity™ Recombinant Rabbit Monoclonal Antibody (Cat. no. 701058). Indirect ELISA was performed using various dilutions of PRAS40 [pT246] ABfinity™ Recombinant Rabbit Monoclonal Antibody (Cat. No.701058) to detect phospho PRAS40 [pT246] peptide coated onto the plate. A non-linear regression analysis was performed (4 PL) and LOD and LOQ for the antibody was determined.

### Explanation of symbols

Symbol	Description	Symbol	Description
	Catalogue Number		Batch code
	Research Use Only		<i>In vitro</i> diagnostic medical device
	Use by		Temperature limitation
	Manufacturer		European Community authorised representative
	Without, does not contain		With, contains
	Protect from light		Consult accompanying documents
	Directs the user to consult instructions for use (IFU), accompanying the product.		

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