

## **Protor-1 Polyclonal Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58103

### **Specification**

# **Protor-1 Polyclonal Antibody - Product Information**

Application WB, IHC-P, IHC-F, IF, E

Primary Accession P85299

Reactivity
Host
Rat, Pig, Dog, Bovine
Rabbit

Host Rabbit
Clonality Polyclonal
Calculated MW 43 KDa
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived

from human Protor-1

Epitope Specificity 51-150/388

Isotype IgG
Purity

affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02%

Proclin300 and 50% Glycerol.

SIMILARITY Belongs to the PROTOR family.

SUBUNIT Part of the mammalian target of rapamycin

complex 2 (mTORC2) which contains MTOR, MLST8, PRR5, RICTOR, MAPKAP1 and DEPTOR. Contrary to mTORC1, mTORC2 does not bind to and is not sensitive to FKBP12-rapamycin. Binds directly to MTOR and RICTOR within the TORC2 complex.

Important Note

This product as supplied is intended for research use only, not for use in human,

therapeutic or diagnostic applications.

## **Background Descriptions**

Protor-1 plays an important role in regulation of PDGF receptor expression and in modulation of PDGF signaling. It is thought that Protor-1 may act as a tumor suppressor in breast cancer.

## Protor-1 Polyclonal Antibody - Additional Information

### **Gene ID** 55615

### **Other Names**

Proline-rich protein 5, Protein observed with Rictor-1, Protor-1, PRR5, PROTOR1

## **Target/Specificity**

Most abundant in kidney and liver. Also highly expressed in brain, spleen, testis and placenta. Overexpressed in several colorectal tumors.

### **Dilution**



<span class ="dilution\_WB">WB $\sim$ 1:1000/>span class

- ="dilution\_IHC-P">IHC-P~~N/A</span><br \><span class
- ="dilution\_IHC-F">IHC-F~~N/A</span><br \><span class
- ="dilution\_IF">IF $\sim$ 1:50 $\sim$ 200</span><br/>span class ="dilution\_E">E $\sim$ N/A</span>

#### **Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

### Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

## **Protor-1 Polyclonal Antibody - Protein Information**

### Name PRR5

## **Synonyms PROTOR1**

### **Function**

Associated subunit of mTORC2, which regulates cell growth and survival in response to hormonal signals (PubMed:<a href="http://www.uniprot.org/citations/17461779" target="\_blank">17461779</a>, PubMed:<a href="http://www.uniprot.org/citations/17599906" target="\_blank">17461779</a>, PubMed:<a href="http://www.uniprot.org/citations/17599906" target="\_blank">17500006</a>, PubMed:<a href="http://www.uniprot.org/citations/17599906" target="\_blank

target="\_blank">17491773 </a>, PubMed: <a href="http://www.uniprot.org/citations/29424687" target="\_blank">29424687</a>). mTORC2 is activated by growth factors, but, in contrast to mTORC1, seems to be nutrient-insensitive (PubMed: <a

mTORC1, seems to be nutrient-insensitive (PubMed:<a href="http://www.uniprot.org/citations/17461779" target="\_blank">17461779</a>, PubMed:<a href="http://www.uniprot.org/citations/17599906" target="\_blank">17599906</a>, PubMed:<a href="http://www.uniprot.org/citations/29424687" target="\_blank">29424687</a>). mTORC2 seems to function upstream of Rho GTPases to regulate the actin cytoskeleton, probably by activating one or more Rho-type guanine nucleotide exchange factors (PubMed:<a href="http://www.uniprot.org/citations/17461779" target="\_blank">17461779</a>, PubMed:<a href="http://www.uniprot.org/citations/17599906" target="\_blank">17599906</a>, PubMed:<a href="http://www.uniprot.org/citations/29424687" target="\_blank">29424687</a>). PRR5 plays an important role in regulation of PDGFRB expression and in modulation of platelet-derived growth factor signaling (PubMed:<a href="http://www.uniprot.org/citations/17599906" target="\_blank">17599906</a>). May act as a tumor suppressor in breast cancer (PubMed:<a href="http://www.uniprot.org/citations/15718101" target="\_blank">15718101</a>/a>).

## **Tissue Location**

Most abundant in kidney and liver. Also highly expressed in brain, spleen, testis and placenta. Overexpressed in several colorectal tumors.

## **Protor-1 Polyclonal Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety





• Cell Culture

Protor-1 Polyclonal Antibody - Images