

**PREX1 Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP12575b**

**Specification**

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**PREX1 Antibody (C-term) - Product Information**

Application	WB, IHC-P, FC,E
Primary Accession	<a href="#">Q8TCU6</a>
Other Accession	<a href="#">NP_065871.2</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	186203
Antigen Region	1134-1163

**PREX1 Antibody (C-term) - Additional Information**

**Gene ID** 57580

**Other Names**

Phosphatidylinositol 3, 5-trisphosphate-dependent Rac exchanger 1 protein, P-Rex1, PtdIns(3, 5)-dependent Rac exchanger 1, PREX1, KIAA1415

**Target/Specificity**

This PREX1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1134-1163 amino acids from the C-terminal region of human PREX1.

**Dilution**

WB~~1:1000  
IHC-P~~1:10~50  
FC~~1:25

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

PREX1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**PREX1 Antibody (C-term) - Protein Information**

**Name** PREX1

**Synonyms** KIAA1415

**Function** Functions as a RAC guanine nucleotide exchange factor (GEF), which activates the Rac proteins by exchanging bound GDP for free GTP. Its activity is synergistically activated by phosphatidylinositol 3,4,5-trisphosphate and the beta gamma subunits of heterotrimeric G protein. May function downstream of heterotrimeric G proteins in neutrophils.

**Cellular Location**

Cytoplasm, cytosol. Cell membrane. Note=Mainly cytosolic. Some amount is apparently associated to the plasma membrane

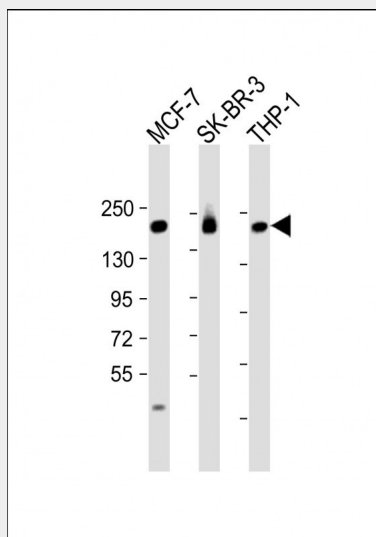
**Tissue Location**

Mainly expressed in peripheral blood leukocytes and brain. Expressed at intermediate level in spleen and lymph nodes, and weakly expressed in other tissues

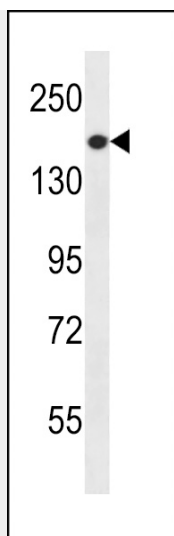
**PREX1 Antibody (C-term) - Protocols**

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

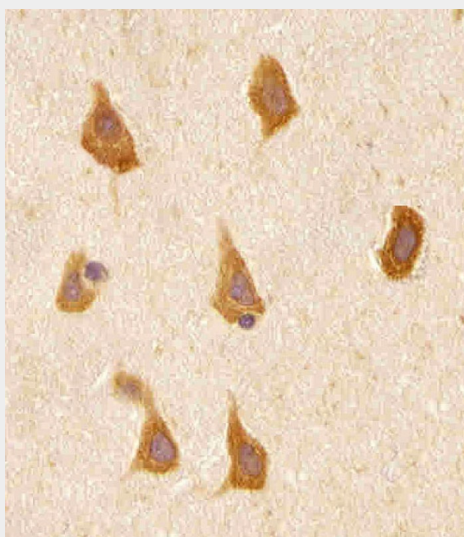
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**PREX1 Antibody (C-term) - Images**

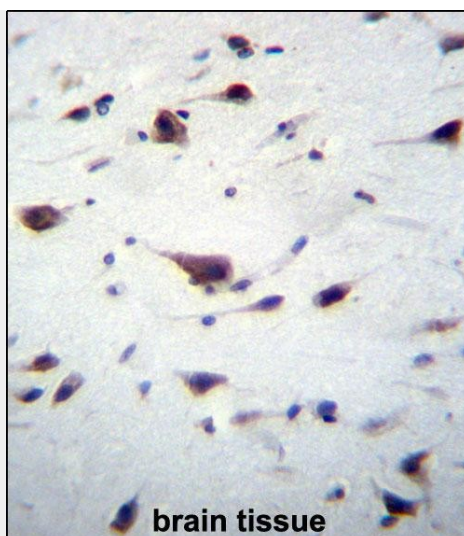
All lanes : Anti-PREX1 Antibody (C-term) at 1:2000 dilution Lane 1: MCF-7 whole cell lysate Lane 2: SK-BR-3 whole cell lysate Lane 3: THP-1 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 186 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



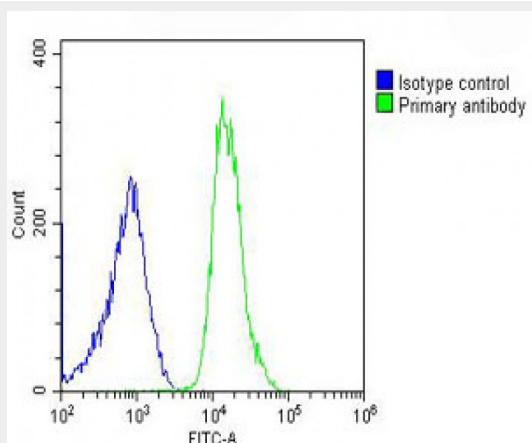
PREX1 Antibody (C-term) (Cat. #AP12575b) western blot analysis in NCI-H460 cell line lysates (35ug/lane). This demonstrates the PREX1 antibody detected the PREX1 protein (arrow).



AP12575b staining PREX1 in human brain tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0.5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hour at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



PREX1 Antibody (C-term) (Cat. #AP12575b) immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of PREX1 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



Overlay histogram showing U-2OS cells stained with AP12575b (green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP12575b, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed (OH191631) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG (1 µg/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >10,000 events was performed.

### PREX1 Antibody (C-term) - Background

The protein encoded by this gene acts as a guanine nucleotide exchange factor for the RHO family of small GTP-binding proteins (RACs). It has been shown to bind to and activate RAC1 by exchanging bound GDP for free GTP. The encoded protein, which is found mainly in the cytoplasm, is activated by phosphatidylinositol-3,4,5-trisphosphate and the beta-gamma subunits of heterotrimeric G proteins.

### PREX1 Antibody (C-term) - References

Lewis, J.P., et al. Genomics 96(4):211-219(2010)  
Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :  
Nie, B., et al. Cell. Signal. 22(5):770-782(2010)  
Carretero-Ortega, J., et al. Mol. Pharmacol. 77(3):435-442(2010)  
Ledezma-Sanchez, B.A., et al. Biochem. Biophys. Res. Commun. 391(4):1647-1652(2010)