

**Goat Anti-PREX1 Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF2191a****Specification**

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**Goat Anti-PREX1 Antibody - Product Information**

Application	WB, E
Primary Accession	<a href="#">Q8TCU6</a>
Other Accession	<a href="#">NP_065871</a> , <a href="#">57580</a> , <a href="#">277360 (mouse)</a> , <a href="#">311647 (rat)</a>
Reactivity	Human
Predicted	Mouse, Rat, Dog
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	186203

**Goat Anti-PREX1 Antibody - Additional Information****Gene ID** 57580**Other Names**

Phosphatidylinositol 3, 4, 5-trisphosphate-dependent Rac exchanger 1 protein, P-Rex1, PtdIns(3, 4, 5)-dependent Rac exchanger 1, PREX1, KIAA1415

**Dilution**

WB~~1:1000

E~~N/A

**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-PREX1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-PREX1 Antibody - 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

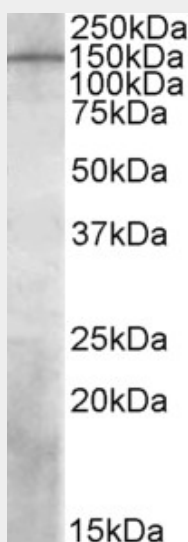
**Tissue Location**

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

**Goat Anti-PREX1 Antibody - 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](#)

**Goat Anti-PREX1 Antibody - Images**

AF2191a (1 µg/ml) staining of Human Temporal Cortex lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

**Goat Anti-PREX1 Antibody - 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.

### **Goat Anti-PREX1 Antibody - References**

Analysis of candidate genes on chromosome 20q12-13.1 reveals evidence for BMI mediated association of PREX1 with type 2 diabetes in European Americans. Lewis JP, et al. Genomics, 2010 Oct. PMID 20650312.

Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.

Characterization of P-Rex1 for its role in fMet-Leu-Phe-induced superoxide production in reconstituted COS(phox) cells. Nie B, et al. Cell Signal, 2010 May. PMID 20074642.

Sphingosine-1-phosphate receptor S1P1 is regulated by direct interactions with P-Rex1, a Rac guanine nucleotide exchange factor. Ledezma-Sánchez BA, et al. Biochem Biophys Res Commun, 2010 Jan 22. PMID 20036214.

Phosphatidylinositol 3,4,5-trisphosphate-dependent Rac exchanger 1 (P-Rex-1), a guanine nucleotide exchange factor for Rac, mediates angiogenic responses to stromal cell-derived factor-1/chemokine stromal cell derived factor-1 (SDF-1/CXCL-12) linked to Rac activation, endothelial cell migration, and in vitro angiogenesis. Carretero-Ortega J, et al. Mol Pharmacol, 2010 Mar. PMID 20018810.