

# Datasheet for ABIN7602086 anti-PREX2 antibody (AA 582-1094)



### Overview

Quantity:	100 μg
Target:	PREX2 (DEPDC2)
Binding Specificity:	AA 582-1094
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PREX2 antibody is un-conjugated
Application:	ELISA, Western Blotting (WB)

#### **Product Details**

Purpose:	Anti-PREX2 Antibody Picoband®
Immunogen:	E.coli-derived human PREX2 recombinant protein (Position: D582-Q1094).
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Anti-PREX2 Antibody Picoband® (ABIN7602086). Tested in ELISA, WB applications. This antibody reacts with Human, MouseThe brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Purification:	Immunogen affinity purified.

#### **Target Details**

Target:	PREX2 (DEPDC2)
Alternative Name:	PREX2 (DEPDC2 Products)
Background:	Synonyms: Neurocan core protein, Chondroitin sulfate proteoglycan 3, NCAN, CSPG3, NEUR,
	Tissue Specificity: Brain.
	Background: Phosphatidylinositol-3,4,5-trisphosphate-dependent Rac exchange factor 2 is a
	protein that in humans is encoded by the PREX2 gene. The protein encoded by this gene
	belongs to the phosphatidylinositol 3,4,5-trisphosphate (PIP3)-dependent Rac exchanger
	(PREX) family, which are Dbl-type guanine-nucleotide exchange factors for Rac family small G
	proteins. Structural domains of this protein include the catalytic diffuse B-cell lymphoma
	homology and pleckstrin homology (DHPH) domain, two disheveled, EGL-10, and pleckstrin
	homology (DEP) domains, two PDZ domains, and a C-terminal inositol polyphosphate-4
	phosphatase (IP4P) domain that is found in one of the isoforms. This protein facilitates the
	exchange of GDP for GTP on Rac1, allowing the GTP-bound Rac1 to activate downstream
	effectors. Studies also show that the pleckstrin homology domain of this protein interacts with
	the phosphatase and tensin homolog (PTEN) gene product to inhibit PTEN phosphatase
	activity, thus activating the phosphoinositide-3 kinase (PI3K) signaling pathway. Conversely, the
	PTEN gene product has also been shown to inhibit the GEF activity of this protein. This gene
	plays a role in insulin-signaling pathways, and either mutations or overexpression of this gene
	have been observed in some cancers.
Molecular Weight:	183 kDa
Gene ID:	80243
UniProt:	Q70Z35
Application Details	
Application Notes:	Western blot, 0.25-0.5 μg/mL, Mouse
	ELISA, 0.1-0.5 μg/mL, -
	1. Berger, M. F., Hodis, E., Heffernan, T. P., Deribe, Y. L., Lawrence, M. S., Protopopov, A., Ivanova
	E., Watson, I. R., Nickerson, E., Ghosh, P., Zhang, H., Zeid, R., and 36 others. Melanoma genome
	sequencing reveals frequent PREX2 mutations. Nature 485: 502-506, 2012. 2. Donald, S., Hill, K.

Lecureuil, C., Barnouin, R., Krugmann, S., Coadwell, W. J., Andrews, S. R., Walker, S. A., Hawkins,

P. T., Stephens, L. R., Welch, H. C. E. P-Rex2, a new guanine-nucleotide exchange factor for Rac.

FEBS Lett. 572: 172-176, 2004. 3. Donald, S., Humby, T., Fyfe, I., Segonds-Pichon, A., Walker, S.

A., Andrews, S. R., Coadwell, W. J., Emson, P., Wilkinson, L. S., Welch, H. C. E. P-Rex2 regulates

## **Application Details**

	Purkinje cell dendrite morphology and motor coordination. Proc. Nat. Acad. Sci. 105: 4483-4488, 2008.
Restrictions:	For Research Use only
Handling	
Format:	Lyophilized
Reconstitution:	Adding 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 μg/mL
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Storage:	4 °C,-20 °C
Storage Comment:	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month.  It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.