

ARG43953 anti-PREX2 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes PREX2
Tested Reactivity	Hu
Tested Application	ELISA, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	PREX2
Species	Human
Immunogen	Human PREX2 recombinant protein
Conjugation	Un-conjugated
Alternate Names	PREX2; Phosphatidylinositol-3,4,5-Trisphosphate Dependent Rac Exchange Factor 2; PPP1R129; P-REX2; DEPDC2; DEP.2; Phosphatidylinositol 3,4,5-Trisphosphate-Dependent Rac Exchanger 2 Protein; Protein Phosphatase 1, Regulatory Subunit 129; PtdIns(3,4,5)-Dependent Rac Exchanger 2; DEP Domain-Containing Protein 2; FLJ12987; Phosphatidylinositol-3,4,5-Trisphosphate-Dependent Rac Exchange Factor 2; DEP Domain Containing 2; P-Rex2

Application Instructions

Application table	Application	Dilution
	ELISA	0.1-0.5 µg/ml
	WB	0.25-0.5 µg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form	Liquid
Buffer	0.9% NaCl, 0.2% Na2HPO4 and 4% Trehalose.
Stabilizer	4% Trehalose
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Gene Symbol	PREX2
Gene Full Name	Phosphatidylinositol-3,4,5-Trisphosphate Dependent Rac Exchange Factor 2
Background	<p>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.</p>
Function	<p>Functions as a RAC1 guanine nucleotide exchange factor (GEF), activating 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. Mediates the activation of RAC1 in a PI3K-dependent manner. May be an important mediator of Rac signaling, acting directly downstream of both G protein-coupled receptors and phosphoinositide 3-kinase.</p>
Calculated Mw	183 kDa
Cellular Localization	Cytosol, Plasma membrane

Images



ARG43953 anti-PREX2 antibody WB image

Western blot: Mouse skeletal muscle stained with ARG43953 anti-PREX2 antibody at 0.5 µg/mL dilution.