ARG57800
anti-PHLPP1 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes PHLPP1
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	PHLPP1
Species	Human
Immunogen	Recombinant fusion protein corresponding to aa. 1508-1717 of Human PHLPP1 (NP_919431.2).
Conjugation	Un-conjugated
Alternate Names	PHLPP; PH domain-containing family E member 1; Suprachiasmatic nucleus circadian oscillatory protein; PH domain leucine-rich repeat-containing protein phosphatase 1; Pleckstrin homology domain-containing family E member 1; hSCOP; EC 3.1.3.16; SCOP; PLEKHE1

Application Instructions

Application table

Application	Dilution
ICC/IF	1:50 - 1:200
IHC-P	1:50 - 1:200
WB	1:500 - 1:2000

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	BT-474

Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
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. 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.

Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	PHLPP1
Gene Full Name	PH domain and leucine rich repeat protein phosphatase 1
Background	This gene encodes a member of the serine/threonine phosphatase family. The encoded protein promotes apoptosis by dephosphorylating and inactivating the serine/threonine kinase Akt, and functions as a tumor suppressor in multiple types of cancer. Increased expression of this gene may also play a role in obesity and type 2 diabetes by interfering with Akt-mediated insulin signaling. [provided by RefSeq, Dec 2011]
Function	Protein phosphatase involved in regulation of Akt and PKC signaling. Mediates dephosphorylation in the C-terminal domain hydrophobic motif of members of the AGC Ser/Thr protein kinase family; specifically acts on 'Ser-473' of AKT2 and AKT3, 'Ser-660' of PRKCB and 'Ser-657' of PRKCA. Isoform 2 seems to have a major role in regulating Akt signaling in hippocampal neurons (By similarity). Akt regulates the balance between cell survival and apoptosis through a cascade that primarily alters the function of transcription factors that regulate pro- and antiapoptotic genes. Dephosphorylation of 'Ser-473' of Akt triggers apoptosis and suppression of tumor growth. Dephosphorylation of PRKCA and PRKCB leads to their destabilization and degradation. Dephosphorylates STK4 on 'Thr-387' leading to STK4 activation and apoptosis. Dephosphorylates RPS6KB1 and is involved in regulation of cap-dependent translation. Inhibits cancer cell proliferation and may act as a tumor suppressor. Dephosphorylates RAF1 inhibiting its kinase activity. May act as a negative regulator of K-Ras signaling in membrane rafts (By similarity). Involved in the hippocampus-dependent long-term memory formation (By similarity). Involved in circadian control by regulating the consolidation of circadian periodicity after resetting (By similarity). Involved in development and function of regulatory T cells (By similarity). [UniProt]
Calculated Mw	185 kDa
Cellular Localization	Cell membrane, cytoplasm, membrane, nucleus, peripheral membrane protein. [UniProt]

Images

ARG57800 anti-PHLPP1 antibody WB image

Western blot: 25 µg of BT-474 cell lysate stained with ARG57800 anti-PHLPP1 antibody at 1:1000 dilution.