

## 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.

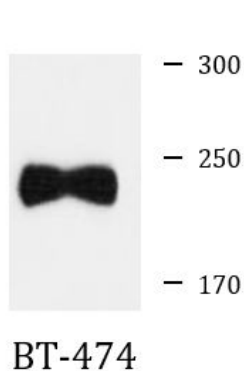
**Note**

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.