OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for AP05145PU-N

PPAP2C (PLPP2) Rabbit Polyclonal Antibody

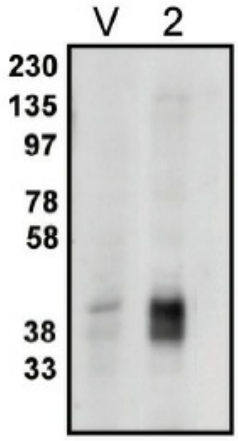
Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	**Western Blot:** 10 - 15 µg/ml. Lysate SHOULD NOT be boiled/heated. Boiling LPP2 with sample buffer will aggregate the protein. Lysates should be prepared by mixing cells with lysis buffer (possibly with extra detergent) to solubiliye the protein before adding sample buffer.
Reactivity:	Human
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Unique peptide derived from the human lysophospholipid phosphatase 2 protein.
Specificity:	This antibody reacts to Lyosphospholipid Phosphatase (LPP) 2.
Formulation:	Phosphate buffered saline with 0.08% sodium azide State: Purified State: Liquid purified Ig
Concentration:	lot specific
Conjugation:	Unconjugated
Storage:	Upon receipt, store undiluted (in aliquots) at -20°C. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	phospholipid phosphatase 2
Database Link:	Entrez Gene 8612 Human O43688

Background: Phosphatidic acid phosphatase type 2 (PAP2) was originally identified as a plasma membrane enzyme that catalyses the dephosphorylation of the putative second messenger, phosphatidic acid (PA) to diacylglycerol (DG) [1]. Subsequently, multiple isoforms of PAP2 were cloned [2-5]. It was found that these enzymes dephosphorylate a number of lipid phosphates in vitro other than PA, including the potent bioactive lipids, lysophosphatidic acid (LPA) and sphingosine 1-phosphate (S1P). Therefore, they have been renamed lipid phosphate phosphatases (LPPs). Currently, there are four members of this family called LPP1, LPP1a, LPP2 and LPP3 [6]. S1P [7] and LPA [8] regulate the proliferation, differentiation, apoptosis and migration of cells by binding to a family of G protein-coupled receptors. Thus, EDG1/S1P1, EDG3/S1P3, EDG5/S1P2/AGR16/H218, EDG6/S1P4 and EDG8/S1P5/nrg-1 are high affinity S1P receptors [7] whereas EDG2/LPA1, EDG4/LPA2 and EDG7/LPA3 have high affinity for LPA [8]. Recently, the over-expression of LPP1 was shown to limit LPA-stimulated signalling in Rat2 fibroblasts [9] and LPA-stimulated DNA synthesis in HEK 293 cells [10]. Similarly, over-expression of LPP1, LPP1a and LPP2 attenuate S1P-signalling to the p42/p44 mitogen activated protein kinase cascade [11].

Synonyms: PAP2-gamma

Product images:



Western blot analysis using LPP2 antibody on vector-controlled HEK-293 cells (V) and HEK-293 cells overexpressing LPP2 protein (2) at 1 ug/ml.