

Product datasheet for KN220972LP

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

Phospholipase A2 (PLA2G4A) Human Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)

Format: 2 gRNA vectors, 1 Luciferase-Puro donor, 1 scramble control

Donor DNA: Luciferase-Puro
Symbol: Phospholipase A2

Locus ID: 5321

Components: KN220972G1, Phospholipase A2 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN220972G2, Phospholipase A2 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002) **KN220972LPD**, donor DNA containing left and right homologous arms and Luciferase-Puro

functional cassette.

GE100003, scramble sequence in pCas-Guide vector

Disclaimer: These products are manufactured and supplied by OriGene under license from ERS. The kit is

designed based on the best knowledge of CRISPR technology. The system has been functionally validated for knocking-in the cassette downstream the native promoter. The efficiency of the knock-out varies due to the nature of the biology and the complexity of the

experimental process.

RefSeq: <u>NM 001311193</u>, <u>NM 024420</u>

UniProt ID: <u>P47712</u>

Synonyms: cPLA2; cPLA2-alpha; PLA2G4

Summary: This gene encodes a member of the cytosolic phospholipase A2 group IV family. The enzyme

catalyzes the hydrolysis of membrane phospholipids to release arachidonic acid which is subsequently metabolized into eicosanoids. Eicosanoids, including prostaglandins and leukotrienes, are lipid-based cellular hormones that regulate hemodynamics, inflammatory

responses, and other intracellular pathways. The hydrolysis reaction also produces

lysophospholipids that are converted into platelet-activating factor. The enzyme is activated by increased intracellular Ca(2+) levels and phosphorylation, resulting in its translocation from the cytosol and nucleus to perinuclear membrane vesicles. Alternative splicing results in

multiple transcript variants. [provided by RefSeq, Jul 2015]





Product images:

Donor Vector Edited Chromosome



RFP, Luc, and mBFP will be under native gene promoter