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Product datasheet for TR514073

Pla2g4a Mouse shRNA Plasmid (Locus ID 18783)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Pla2g4a Mouse shRNA Plasmid (Locus ID 18783)
Locus ID:	18783
Synonyms:	cP; cPL; cPLA2; cPLA2-alpha; cPLA2alpha; Pla; Pla2g4
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Pla2g4a - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 18783). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	BC003816, NM_008869, NM_008869.1, NM_008869.2, NM_008869.3, NM_008869.4
UniProt ID:	P47713
Summary:	The protein encoded by this gene is a member of the phospholipase A2 group IV family. This enzyme hydrolyzes membrane phospholipids, thereby releasing the polyunsaturated fatty acid, arachidonic acid. Arachidonic acid is further metabolized into eicosanoids such as leukotrienes, thromboxanes and prostaglandins, that play important roles in regulating diverse biological processes such as inflammatory responses, membrane and actin dynamics, and tumorigenesis. A rise in intracellular calcium levels results in binding of calcium to the C2 domain of this protein, and triggers the translocation from the cytosol to intracellular membranes, including the Golgi apparatus. Disruption of this gene in mice led to decreased levels of eicosonaoids and platelet-activating factor, decreased allergic symptoms, and impaired reproductive ability in females. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Mar 2015]
shRNA Design:	These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our custom shRNA service.

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Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).