



Recombinant Rat Cytosolic phospholipase A2 (Pla2g4a)

Product Code	CSB-YP018097RA
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	P50393
Product Type	Recombinant Protein
Immunogen Species	Rattus norvegicus (Rat)
Purity	≥85% (SDS-PAGE)
Sequence	MSFIDPYQHI IVEHQYSHKF TVVVLRA TKGTFGDMLD TDPYVELFI STTPDSRKRT RHFNDINPV WNETFEFILD PNQENVLEIT LMDANYVMDE TLGTATFPVS SMKVGEKKEV PFIFNQVTEM ILEMSLEVCS CPDLRFSMAL CDQEKTFRRQ RKENIKENMK KLLGPKKSEG LYSTRDVPV AILGSGGGFR AMVGFSGVMM ALYESGILDC ATYVAGLSGS TWYMSTLYSH PDFPEKGPEE INEELMKNVS HNPLLLTPQ KVKRYVESLW KKKSSGQPVT FTDIFGMLIG ETLIQNRMS TLSSLKEKVS AARCLPLFT CLHVKPDVSE LMFADWVEFS PYEIGMAKYG TFMTPDFLGS KFFMGTVVKK YEENPLHFLM GVGWSAFSIL FNRVLGVSGS QNKGSTMEEE LENITAKHIV SNDSSSDSDE AQGPKGTE DAEREYQNDN QASWVHRMLM ALVSDSALFN TREGRAGKEH NFMLGLNLNT SYPLSPLRDF SPQDSFDDDE LAAVADPDE FERIYEPLDV KSKKIHVVD GLTFNLPLYL ILRPQRGV DL IISFDFSARP SDTSPPFKEL LLAEKWAKMN KLPFPKIDPY VFDREGLKEC YVFKPKNP DV EKDCPTIIHF VLANINFRKY KAPGVLRETK EEKEIADF DI FDDPESPFST FNFQYPNQAF KRLHDLMYFN TLNNIDVIK AIVESIEYRR QNPSRCSVSL SNVEARKFFN KEFLSKPTAE SI
Source	Yeast
Target Names	Pla2g4a
Protein Names	Recommended name: Cytosolic phospholipase A2 Short name= cPLA2 Alternative name(s): Phospholipase A2 group IVA Including the following 2 domains: Phospholipase A2 EC= 3.1.1.4 Alternative name(s): Phosphatidylcholine 2-acy
Expression Region	1-752
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	Tag type will be determined during the manufacturing process.
Protein Length	full length protein
Target Details	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.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at $-20^{\circ}\text{C}/-80^{\circ}\text{C}$. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at $-20^{\circ}\text{C}/-80^{\circ}\text{C}$. The shelf life of lyophilized form is 12 months at $-20^{\circ}\text{C}/-80^{\circ}\text{C}$.