

Recombinant Human Phospholipase A2 protein

Cat. No. PLA2-8393H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human Phospholipase A2 was expressed in E. coli.
Species	Human
Source	E.coli
Description	PLA2 (Type V) is a secretory PLA2 (sPLA2) of approximately 14 kDa and is one of the isoforms in the growing list of the PLA2 enzyme family. This enzyme, rather than the sPLA2 (Type II), is responsible for arachidonic acid mobilization leading to prostaglandin production in macrophages and mast cells. Consistent with this role, sPLA2 (Type V) is associated with the golgi apparatus, nuclear envelope, and plasma membrane in mouse bone marrow-derived mast cells. sPLA2 (Type V) has been cloned from a variety of species including human, mouse, and rat. The enzyme is expressed in heart, lung, placenta, and spleen, as well as P388D1 macrophages and mast cells.
Form	A solution in 50 mM Tris-HCl, pH 8.0, containing 100 mM sodium chloride, 50 mM calcium chloride, and 20% glycerol
Molecular Mass	14 kDa
Purity	≥95% estimated by SDS-PAGE
Unit Definition	One unit is defined as the amount of enzyme required to release 1 μmol of TNB per minute under the following conditions: 25 mM Tris-HCl, pH 7.5, containing 10mM

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CaCl₂, 100 mM KCl, 0.3 mM Triton X-100, 1 mg/ml BSA, 1 mM 1,2-bis(heptanoylthio) Glycerophosphocholine, and 0.5 mM DTNB at 37 centigrade.

Stability

6 months at -80 centigrade; Avoid freeze/thaw cycles by aliquoting the protein and storing at -80 centigrade.

GENE INFORMATION

Gene Name PLA2G2A phospholipase A2, group IIA (platelets, synovial fluid) [Homo sapiens]

Official Symbol PLA2G2A

Synonyms

MOM1; PLA2; PLA2B; PLA2L; PLA2S; PLAS1; sPLA2; phospholipase A2, membrane associated; GLIC sPLA2; NPS-PLA2; group IIA phospholipase A2; non-pancreatic secretory phospholipase A2; phosphatidylcholine 2-acylhydrolase 2A

Gene ID 5320

mRNA Refseq NM_000300

Protein Refseq NP_000291

MIM 172411

UniProt ID P14555

Chromosome Location 1p35

Pathway

Acyl chain remodelling of PC, organism-specific biosystem; Eicosanoid Synthesis, organism-specific biosystem; Fat digestion and absorption, organism-specific

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	biosystem
Function	calcium ion binding; calcium-dependent phospholipase A2 activity; phospholipase A2 activity

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