

cPLA2 Antibody



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Applications: W, IP	Reactivity: H M R Mk	Sensitivity: Endogenous	MW (kDa): 95	Source/Isotype: Rabbit	UniProt ID: #P47712	Entrez-Gene Id: 5321
Product Usage Information	Application				Dilution	
	Western Blotting				1:1000	
	Immunoprecipitation				1:50	
Storage	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.					
Specificity/Sensitivity	cPLA2 Antibody detects endogenous levels of total cPLA2 protein. This antibody does not cross-react with the secreted PLA2 (sPLA2) or cytosolic Ca ²⁺ independent PLA2 (iPLA2).					
Source / Purification	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to the carboxy-terminal residues of human cPLA2. Antibodies are purified by protein A and peptide affinity chromatography.					
Background	Cytosolic phospholipase A2 (cPLA2) is a ubiquitously distributed enzyme that catalyzes the hydrolysis of the sn-2 acyl bond of glycerolipids to produce lysophospholipids and release arachidonic acid (1). cPLA2 has been implicated in diverse cellular responses such as mitogenesis, differentiation, inflammation and cytotoxicity (1). Calcium binding to the amino-terminal CalB domain of cPLA2 promotes the translocation of cPLA2 from cytosol to membrane, where cPLA2 cleaves arachidonic acid from natural membrane (2). Phosphorylation of cPLA2 by MAPK (p42/44 and p38) at Ser505 (3,4) and Ser727 (5) stimulates its catalytic activity.					
Background References	<ol style="list-style-type: none"> 1. Leslie, C.C. (1997) <i>J. Biol. Chem.</i> 272, 16709-16712. 2. Clark, J. D. et al. (1991) <i>Cell</i> 65, 1043-1051. 3. Lin, L. L. et al. (1993) <i>Cell</i> 72, 269-278. 4. Kramer, R.M. (1996) <i>J. Biol. Chem.</i> 271, 27723-27729. 5. Hefner, Y. et al. (2000) <i>J. Biol. Chem.</i> 275, 37542-37551. 					

Species Reactivity	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
Western Blot Buffer	IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.
Applications Key	W: Western Blotting IP: Immunoprecipitation
Cross-Reactivity Key	H: Human M: Mouse R: Rat Mk: Monkey
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