

#53044 Store at -20°C

## Phospho-cPLA2 (Ser505) (D4I2A) Rabbit mAb



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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IP	H M	Endogenous	95	Rabbit IgG	#P47712	5321

Product Usage Information	Application	Dilution
	Western Blotting	1:1000
	Immunoprecipitation	1:100
Storage	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.	
Specificity / Sensitivity	Phospho-cPLA2 (Ser505) (D4I2A) Rabbit mAb recognizes endogenous levels of cPLA2 protein only when phosphorylated at Ser505.	
Source / Purification	Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ser505 of human cPLA2 protein.	
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"> <li>1. Leslie, C.C. (1997) <i>J. Biol. Chem.</i> 272, 16709-16712.</li> <li>2. Clark, J. D. et al. (1991) <i>Cell</i> 65, 1043-1051.</li> <li>3. Lin, L. L. et al. (1993) <i>Cell</i> 72, 269-278.</li> <li>4. Kramer, R.M. (1996) <i>J. Biol. Chem.</i> 271, 27723-27729.</li> <li>5. Hefner, Y. et al. (2000) <i>J. Biol. Chem.</i> 275, 37542-37551.</li> </ol>	

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	<b>WB:</b> Western Blotting <b>IP:</b> Immunoprecipitation
Cross-Reactivity Key	<b>H:</b> human <b>M:</b> mouse <b>R:</b> rat <b>Hm:</b> hamster <b>Mk:</b> monkey <b>Vir:</b> virus <b>Mi:</b> mink <b>C:</b> chicken <b>Dm:</b> D. melanogaster <b>X:</b> Xenopus <b>Z:</b> zebrafish <b>B:</b> bovine <b>Dg:</b> dog <b>Pg:</b> pig <b>Sc:</b> S. cerevisiae <b>Ce:</b> C. elegans <b>Hr:</b> horse <b>GP:</b> Guinea Pig <b>Rab:</b> rabbit <b>All:</b> all species expected
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