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Store at -20C
#2751

Phospho-Lck (Tyr505) Antibody

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W, IP	Reactivity: H M	Sensitivity: Endogenous	MW (kDa): 56	Source/Isotype: Rabbit	UniProt ID: #P06239	Entrez-Gene Id: 3932
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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	Phospho-Lck (Tyr505) Antibody detects endogenous levels of Lck only when phosphorylated at Tyr505. This antibody may cross-react with certain phosphorylated Src family members due to high sequence homology.	
Source / Purification	Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Tyr505 of human Lck. Antibodies are purified by protein A and peptide affinity chromatography.	
Background	<p>The Src family of protein tyrosine kinases, which includes Src, Lyn, Fyn, Yes, Lck, Blk, and Hck, are important in the regulation of growth and differentiation of eukaryotic cells (1). Src activity is regulated by tyrosine phosphorylation at two sites, but with opposing effects. While phosphorylation at Tyr416 in the activation loop of the kinase domain upregulates enzyme activity, phosphorylation at Tyr530 in the carboxy-terminal tail of Csk renders the enzyme less active (2).</p> <p>Lck is essential for T-lymphocyte activation and differentiation (3,4). Phosphorylation of Tyr505 in the carboxy-terminal tail of Lck downregulates its catalytic activity, while phosphorylation of Tyr394 leads to an increase in Lck activity (5).</p>	
Background References	<ol style="list-style-type: none"> 1. Thomas, S.M. and Brugge, J.S. (1997) <i>Annu Rev Cell Dev Biol</i> 13, 513-609. 2. Hunter, T. (1987) <i>Cell</i> 49, 1-4. 3. Molina, T.J. et al. (1992) <i>Nature</i> 357, 161-4. 4. Straus, D.B. and Weiss, A. (1992) <i>Cell</i> 70, 585-93. 5. Chow, L.M. et al. (1993) <i>Nature</i> 365, 156-60. 	
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	
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