

PI3 Kinase p85 Antibody



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

Applications: W, IP	Reactivity: H M R	Sensitivity: Endogenous	MW (kDa): 85	Source/Isotype: Rabbit	UniProt ID: #P27986	Entrez-Gene Id: 5295
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Product Usage Information	Application Western Blotting Immunoprecipitation	Dilution 1:1000 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	PI3 Kinase p85 Antibody detects endogenous levels of PI3 Kinase p85. The antibody will not recognize p50 or p55 spliced isoforms.	
Source / Purification	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro84 of human PI3 Kinase p85 protein. Antibodies are purified by protein A and peptide affinity chromatography.	
Background	Phosphoinositide 3-kinase (PI3K) catalyzes the production of phosphatidylinositol-3,4,5-triphosphate by phosphorylating phosphatidylinositol (PI), phosphatidylinositol-4-phosphate (PIP), and phosphatidylinositol-4,5-bisphosphate (PIP ₂). Growth factors and hormones trigger this phosphorylation event, which in turn coordinates cell growth, cell cycle entry, cell migration, and cell survival (1). PTEN reverses this process, and research studies have shown that the PI3K signaling pathway is constitutively activated in human cancers that have loss of function of PTEN (2). PI3Ks are composed of a catalytic subunit (p110) and a regulatory subunit. Various isoforms of the catalytic subunit (p110 α , p110 β , p110 γ , and p110 δ) have been isolated, and the regulatory subunits that associate with p110 α , p110 β , and p110 δ are p85 α and p85 β (3). In contrast, p110 γ associates with a p101 regulatory subunit that is unrelated to p85. Furthermore, p110 γ is activated by $\beta\gamma$ subunits of heterotrimeric G proteins (4).	
Background References	<ol style="list-style-type: none"> 1. Cantley, L.C. (2002) <i>Science</i> 296, 1655-7. 2. Simpson, L. and Parsons, R. (2001) <i>Exp Cell Res</i> 264, 29-41. 3. Neri, L.M. et al. (2002) <i>Biochim Biophys Acta</i> 1584, 73-80. 4. Stoyanov, B. et al. (1995) <i>Science</i> 269, 690-3. 	
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	
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