



**Orders:** 877-616-CELL (2355)  
orders@cellsignal.com

**Support:** 877-678-TECH (8324)

**Web:** info@cellsignal.com  
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

Store at +4C  
#24961

## NF- $\kappa$ B1 p105/p50 (D4P4D) Rabbit mAb (PE Conjugate)

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

<b>Applications:</b> FC-FP	<b>Reactivity:</b> H M R	<b>Sensitivity:</b> Endogenous	<b>Source/Isotype:</b> Rabbit IgG	<b>UniProt ID:</b> #P25799	<b>Entrez-Gene Id:</b> 18033
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Product Usage Information	Application	Dilution
<b>Storage</b>	Flow Cytometry (Fixed/Permeabilized)	1:50
<b>Specificity/Sensitivity</b>	Supplied in PBS (pH 7.2), less than 0.1% sodium azide and 2 mg/ml BSA. Store at 4°C. Do not aliquot the antibody. Protect from light. Do not freeze.	
<b>Source / Purification</b>	NF- $\kappa$ B1 p105/p50 (D4P4D) Rabbit mAb (PE Conjugate) recognizes endogenous levels of total NF- $\kappa$ B1 p105/p50 protein.	
<b>Description</b>	Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ile415 of mouse NF- $\kappa$ B1 p105/p50 protein.	
<b>Background</b>	This Cell Signaling Technology antibody is conjugated to phycoerythrin (PE) and tested in-house for direct flow cytometry analysis in human cells. This antibody is expected to exhibit the same species cross-reactivity as the unconjugated NF- $\kappa$ B1 p105/p50 (D4P4D) Rabbit mAb #13586.	
<b>Background References</b>	Transcription factors of the nuclear factor $\kappa$ B (NF- $\kappa$ B)/Rel family play a pivotal role in inflammatory and immune responses (1,2). There are five family members in mammals: RelA, c-Rel, RelB, NF- $\kappa$ B1 (p105/p50), and NF- $\kappa$ B2 (p100/p52). Both p105 and p100 are proteolytically processed by the proteasome to produce p50 and p52, respectively. Rel proteins bind p50 and p52 to form dimeric complexes that bind DNA and regulate transcription. In unstimulated cells, NF- $\kappa$ B is sequestered in the cytoplasm by I $\kappa$ B inhibitory proteins (3-5). NF- $\kappa$ B-activating agents can induce the phosphorylation of I $\kappa$ B proteins, targeting them for rapid degradation through the ubiquitin-proteasome pathway and releasing NF- $\kappa$ B to enter the nucleus where it regulates gene expression (6-8). NIK and IKK $\alpha$ (IKK1) regulate the phosphorylation and processing of NF- $\kappa$ B2 (p100) to produce p52, which translocates to the nucleus (9-11).	
	<ol style="list-style-type: none"> <li>Baeuerle, P.A. and Henkel, T. (1994) <i>Annu Rev Immunol</i> 12, 141-79.</li> <li>Baeuerle, P.A. and Baltimore, D. (1996) <i>Cell</i> 87, 13-20.</li> <li>Haskill, S. et al. (1991) <i>Cell</i> 65, 1281-9.</li> <li>Thompson, J.E. et al. (1995) <i>Cell</i> 80, 573-82.</li> <li>Whiteside, S.T. et al. (1997) <i>EMBO J</i> 16, 1413-26.</li> <li>Traenckner, E.B. et al. (1995) <i>EMBO J</i> 14, 2876-83.</li> <li>Scherer, D.C. et al. (1995) <i>Proc Natl Acad Sci USA</i> 92, 11259-63.</li> <li>Chen, Z.J. et al. (1996) <i>Cell</i> 84, 853-62.</li> <li>Senftleben, U. et al. (2001) <i>Science</i> 293, 1495-9.</li> <li>Coope, H.J. et al. (2002) <i>EMBO J</i> 21, 5375-85.</li> <li>Xiao, G. et al. (2001) <i>Mol Cell</i> 7, 401-9.</li> </ol>	

<b>Species Reactivity</b>	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
<b>Applications Key</b>	<b>FC-FP:</b> Flow Cytometry (Fixed/Permeabilized)
<b>Cross-Reactivity Key</b>	<b>H:</b> Human <b>M:</b> Mouse <b>R:</b> Rat
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