

#4921 Store at -20C

Phospho-IkB β (Thr19/Ser23) Antibody



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

Applications: WB	Reactivity: H	Sensitivity: Endogenous	MW (kDa): 48 to 50	Source: Rabbit	UniProt ID: #Q15653	Entrez-Gene Id: 4793
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Product Usage Information	Application Western Blotting	Dilution 1:1000
Storage	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μ g/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.	
Specificity / Sensitivity	Phospho-IkB β (Thr19/Ser23) Antibody detects endogenous levels of human IkB β only when phosphorylated at threonine 19 and serine 23. This antibody also recognizes phosphorylation at Ser19/Ser23 also reported as the sequence for IkB β .	
Species predicted to react based on 100% sequence homology:	Monkey, Dog	
Source / Purification	Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues of human IkB β surrounding Thr19/Ser23. Antibodies are purified by protein A and affinity chromatography.	
Background	<p>The NF-κB/Rel transcription factors are present in the cytosol in an inactive state complexed with the inhibitory IkB proteins (1-3). Activation occurs via phosphorylation of IkBα at Ser32 and Ser36 followed by proteasome-mediated degradation that results in the release and nuclear translocation of active NF-κB (3-7). IkBα phosphorylation and resulting Rel-dependent transcription are activated by a highly diverse group of extracellular signals including inflammatory cytokines, growth factors, and chemokines. Kinases that phosphorylate IkB at these activating sites have been identified (8).</p> <p>The regulation of IkBβ and IkBϵ is similar to that of IkBα. However, the phosphorylation and ubiquitin-mediated degradation of these proteins occurs with much slower kinetics (9). IKK phosphorylation of IkBβ occurs at Ser19 and Ser23, while IkBϵ can be phosphorylated at Ser18 and Ser22 (10). The human sequence of IkB-β has also been reported to contain a threonine at position 19 suggesting that phosphorylation could be Thr19/Ser23 (11).</p>	
Background References	<ol style="list-style-type: none"> 1. Baeuerle, P.A. and Baltimore, D. (1988) <i>Science</i> 242, 540-6. 2. Beg, A.A. and Baldwin, A.S. (1993) <i>Genes Dev</i> 7, 2064-70. 3. Finco, T.S. et al. (1994) <i>Proc Natl Acad Sci USA</i> 91, 11884-8. 4. Brown, K. et al. (1995) <i>Science</i> 267, 1485-8. 5. Brockman, J.A. et al. (1995) <i>Mol Cell Biol</i> 15, 2809-18. 6. Traenckner, E.B. et al. (1995) <i>EMBO J</i> 14, 2876-83. 7. Chen, Z.J. et al. (1996) <i>Cell</i> 84, 853-62. 8. Karin, M. and Ben-Neriah, Y. (2000) <i>Annu Rev Immunol</i> 18, 621-63. 9. Hoffmann, A. et al. (2002) <i>Science</i> 298, 1241-1245. 10. Shirane, M. et al. (1999) <i>J Biol Chem</i> 274, 28169-28174. 11. Lee, J.W. et al. (1995) <i>Mol Endocrinol</i> 9, 243-54. 	

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	WB: Western Blotting

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster
X: Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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