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Phospho-TBK1/NAK (Ser172) (D52C2) XP[®] Rabbit mAb (Alexa Fluor[®] 488 Conjugate)

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

Applications: FC-FP	Reactivity: H M R	Sensitivity: Endogenous	Source/Isotype: Rabbit IgG	UniProt ID: #Q9UHD2	Entrez-Gene Id: 29110
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Product Usage Information	Application Flow Cytometry (Fixed/Permeabilized)	Dilution 1:50
Storage	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.	
Specificity/Sensitivity	Phospho-TBK1/NAK (Ser172) (D52C2) XP [®] Rabbit mAb (Alexa Fluor [®] 488 Conjugate) detects endogenous levels of TBK1 only when phosphorylated at Ser172. This antibody may cross-react with phospho-IKKε.	
Species predicted to react based on 100% sequence homology	Monkey, Xenopus, Bovine, Dog	
Source / Purification	Monoclonal antibody is prepared from animals immunized with a synthetic phosphopeptide corresponding to residues surrounding Ser172 of human TBK1.	
Description	This Cell Signaling Technology antibody is conjugated to Alexa Fluor [®] 488 fluorescent dye and tested in-house for direct flow cytometric analysis in human cells. This antibody is expected to exhibit the same species cross-reactivity as the unconjugated Phospho-TBK1/NAK (Ser172) (D52C2) XP [®] Rabbit mAb #5483.	
Background	TBK1 (TANK-binding kinase 1)/NAK (NF-κB activating kinase) is an IκB kinase (IKK)-activating kinase and can activate IKK through direct phosphorylation (1). TBK1 was identified through association with the TRAF binding protein, TANK, and found to function upstream of NIK and IKK in the activation of NF-κB (2). TBK1 induces IκB degradation and NF-κB activity through IKKβ. TBK1 may mediate IKK and NF-κB activation in response to growth factors that stimulate PKCε activity (1). TBK1 plays a pivotal role in the activation of IRF3 in the innate immune response (3).	
Background References	<ol style="list-style-type: none"> 1. Tojima, Y. et al. (2000) <i>Nature</i> 404, 778-82. 2. Pomerantz, J.L. and Baltimore, D. (1999) <i>EMBO J</i> 18, 6694-704. 3. Fitzgerald, K.A. et al. (2003) <i>Nat Immunol</i> 4, 491-6. 	
Species Reactivity	Species reactivity is determined by testing in at least one approved application (e.g., western blot).	
Applications Key	FC-FP: Flow Cytometry (Fixed/Permeabilized)	
Cross-Reactivity Key	H: Human M: Mouse R: Rat	
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