

#4311 Store at -20°C

## Phospho-p40phox (Thr154) Antibody



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

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB	H M GP	Endogenous	40	Rabbit	#Q15080	4689

<b>Product Usage Information</b>	<b>Application</b> Western Blotting	<b>Dilution</b> 1:1000
<b>Storage</b>	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.	
<b>Specificity / Sensitivity</b>	Phospho-p40phox (Thr154) Antibody detects endogenous levels of p40phox only when phosphorylated at threonine 154. This antibody does not cross-react with other phosphorylated phox subunits.	
<b>Source / Purification</b>	Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Thr154 of human p40phox. Antibodies are purified by protein A and peptide affinity chromatography.	
<b>Background</b>	The phagocytic NADPH oxidase is a multiprotein enzyme that catalyzes the reduction of oxygen to superoxide in response to invasion of pathogens into the body. The NADPH oxidase consists of 6 subunits, the membrane-bound p91phox and p22phox heterodimer (also known as cytochrome b558), the cytoplasmic complex of p40phox, p47phox and p67phox, and the small GTPase Rac2. Activation of NADPH oxidase is initiated by phosphorylation of the cytosolic complex, which induces conformational changes of the complex and ultimately leads to the translocation of the cytoplasmic complex to the membrane to form an active enzyme with cytochrome b558 (1). Thr154 and Ser315 of p40 phox have been identified as PKC phosphorylation sites modified during activation of the phagocyte NADPH oxidase (2).	
<b>Background References</b>	1. Babior, B.M. (1999) <i>Blood</i> 93, 1464-1476. 2. Bouin, A.P. et al. (1998) <i>J Biol Chem</i> 273, 30097-103.	

<b>Species Reactivity</b>	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
<b>Western Blot Buffer</b>	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.
<b>Applications Key</b>	<b>WB:</b> Western Blotting
<b>Cross-Reactivity Key</b>	<b>H:</b> human <b>M:</b> mouse <b>R:</b> rat <b>Hm:</b> hamster <b>Mk:</b> monkey <b>Vir:</b> virus <b>Mi:</b> mink <b>C:</b> chicken <b>Dm:</b> D. melanogaster <b>X:</b> Xenopus <b>Z:</b> zebrafish <b>B:</b> bovine <b>Dg:</b> dog <b>Pg:</b> pig <b>Sc:</b> S. cerevisiae <b>Ce:</b> C. elegans <b>Hr:</b> horse <b>GP:</b> Guinea Pig <b>Rab:</b> rabbit <b>All:</b> all species expected
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