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Phospho-CSF-1R/M-CSF-R (Tyr809) 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	Endogenous	175	Rabbit	#P07333	1436

Product Usage Information	Application Western Blotting	Dilution 1:1000
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	Phospho-CSF-1R/M-CSF-R (Tyr809) Antibody detects endogenous levels of CSF-1R/M-CSF-R only when phosphorylated at tyrosine 809. The antibody may cross-react slightly with activated KDR and PDGF receptors.	
Source / Purification	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues around Tyr809 of human CSF-1R/M-CSF-R. Antibodies are purified by protein A and peptide affinity chromatography.	
Background	Macrophage-colony stimulating factor (M-CSF, CSF-1) receptor is an integral membrane tyrosine kinase encoded by the <i>c-fms</i> proto-oncogene. M-CSF receptor is expressed in monocytes (macrophages and their progenitors) and drives growth and development of this blood cell lineage (1-3). Binding of M-CSF to its receptor induces receptor dimerization, activation, and autophosphorylation of cytoplasmic tyrosine residues used as docking sites for SH2-containing signaling proteins (4). There are at least five major tyrosine autophosphorylation sites. Tyr723 (Tyr721 in mouse) is located in the kinase insert (KI) region. Phosphorylated Tyr723 binds the p85 subunit of PI3 kinase as well as PLCγ2 (5). Phosphorylation of Tyr809 provides a docking site for Shc (5). Overactivation of this receptor can lead to a malignant phenotype in various cell systems (6). The activated M-CSF receptor has been shown to be a predictor of poor outcome in advanced epithelial ovarian carcinoma (7) and breast cancer (8).	
Background References	<ol style="list-style-type: none"> 1. Stanley, E.R. et al. (1978) <i>Nature</i> 274, 168-70. 2. Byrne, P.V. et al. (1981) <i>J Cell Biol</i> 91, 848-53. 3. Bourette, R.P. and Rohrschneider, L.R. (2000) <i>Growth Factors</i> 17, 155-66. 4. Novak, U. et al. (1996) <i>Oncogene</i> 13, 2607-13. 5. Bourette, R.P. et al. (1997) <i>EMBO J</i> 16, 5880-93. 6. Morley, G.M. et al. (1999) <i>Oncogene</i> 18, 3076-84. 7. Toy, E.P. et al. (2001) <i>Gynecol Oncol</i> 80, 194-200. 8. Maher, M.G. et al. (1998) <i>Clin Cancer Res</i> 4, 1851-6. 	

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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