

#4672 Store at -20°C

JNK2 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 R Hm Mk	Endogenous	54	Rabbit	#P45984	5601

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	JNK2 Antibody detects endogenous levels of JNK2. It will only recognize the JNK2 Alpha 2 and JNK2 Beta 2 isoforms. It will not recognize JNK2 Alpha 1 and JNK2 Beta 1 isoforms. This antibody does not recognize p38 MAP kinase, p44/42MAP kinase or JNK1.	
Source / Purification	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to human JNK2. Antibodies are purified by protein A and peptide affinity chromatography.	
Background	The stress-activated protein kinase/Jun-amino-terminal kinase SAPK/JNK is potently and preferentially activated by a variety of environmental stresses, including UV and gamma radiation, ceramides, inflammatory cytokines, and in some instances, growth factors and GPCR agonists (1-6). As with the other MAPKs, the core signaling unit is composed of a MAPKKK, typically MEKK1-MEKK4, or by one of the mixed lineage kinases (MLKs), which phosphorylate and activate MKK4/7. Upon activation, MKKs phosphorylate and activate the SAPK/JNK kinase (2). Stress signals are delivered to this cascade by small GTPases of the Rho family (Rac, Rho, cdc42) (3). Both Rac1 and cdc42 mediate the stimulation of MEKKs and MLKs (3). Alternatively, MKK4/7 can be activated in a GTPase-independent mechanism via stimulation of a germinal center kinase (GCK) family member (4). There are three SAPK/JNK genes each of which undergoes alternative splicing, resulting in numerous isoforms (3). SAPK/JNK, when active as a dimer, can translocate to the nucleus and regulate transcription through its effects on c-Jun, ATF-2, and other transcription factors (3,5).	
Background References	<ol style="list-style-type: none"> 1. Davis, R.J. (1999) <i>Biochem Soc Symp</i> 64, 1-12. 2. Ichijo, H. (1999) <i>Oncogene</i> 18, 6087-93. 3. Kyriakis, J.M. and Avruch, J. (2001) <i>Physiol Rev</i> 81, 807-69. 4. Kyriakis, J.M. (1999) <i>J Biol Chem</i> 274, 5259-62. 5. Leppä, S. and Bohmann, D. (1999) <i>Oncogene</i> 18, 6158-62. 6. Whitmarsh, A.J. and Davis, R.J. (1998) <i>Trends Biochem Sci</i> 23, 481-5. 	

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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