JIP4/SPAG9 (D72F4) XP[®] Rabbit mAb





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Applications: W, IP, IHC-P, IF-IC, FC-FP	Reactivity: H M R Mk	Sensitivity: Endogenous	MW (kDa): 190	Source/Isotype: Rabbit IgG	UniProt ID: #O60271	Entrez-Gene Id: 9043	
Product Usage Information		Application Western Blotting Immunoprecipitation Immunohistochemistr Immunofluorescence Flow Cytometry (Fixed	y (Paraffin) (Immunocytochem /Permeabilized)	istry)		Dilution 1:1000 1:50 1:50 1:50 1:50	
Storage		Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. Do not aliquot the antibody.					
Specificity/Sen	sitivity	For a carrier free (BSA and azide free) version of this product see product #49354. JIP4/SPAG9 (D72F4) XP [®] Rabbit mAb recognizes endogenous levels of total JIP4 protein. This antibody will detect known splice variants of JIP4 (SPAG9, JLP) but is not predicted to cross-react with other JIP family members.					
Source / Purific	ation	Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to a region surrounding Leu237 of human JIP4 protein.					
Background		JNK-Interacting Proteir signaling by acting as promote JNK activatior downstream effectors orchestrate PKA signal mixed-lineage kinases	ns (JIPs), as their na scaffolds for compo n in response to str in the stress-kinasi ling. JIPs bind to an , ΜΚΚ7, p38α MAPI	me implies, coordinate onents of the JNK signal ess by amalgamating ar e pathway analogous to array of MAPKs and oth Հ, JNK1-3, Max, Myc, NF-	c-Jun N-terminal Ki ing cascade (1). JIP: nd co-localizing ups the mechanism by her signaling protei kB, LRRK2, and oth	nase (JNK) s localize and stream kinases and v which AKAPs ins, including the ers (1-4).	
		There are four known domain structure. JIP1 they have been implica post-traumatic brain d share some overlappir (sperm-associated ant numerous component JNK1-3 (1,3). However, instead favoring stimu	JIPs, JIP1-4, of whic and JIP2 are mainl ated in cellular resp amage (5-7). Altho ng functions and ar igen-9) gene, is a h s of the stress-activ unlike the other JIF lation of p38 MAPP	h JIP1 and JIP2 share exit y expressed in neurons, oonses to metabolic stre ugh architecturally distin e more broadly express omooligomer that binds vated kinase cascade inc members, JIP4 does no & signaling events in res	tensive sequence h testis and in β pan ss, the developmer nct from JIP1 and JI ed. JIP4, encoded b s to and coordinate luding MEK4, MEK t appear to activate ponse to cellular st	omology and ccreatic cells, where nt of diabetes, and P2, JIP3 and JIP4 by the SPAG9 es the activation of K3, p38α MAPK, and e JNK directly, ress (3,8).	
		In addition to mediatir interact with ARF6 and are extensive reports i it is unclear what effec	ng stress responses PIKfyve, thus regundicating that JIP4 t, if any, this has or	s, JIP4 (or its splice varia lating microtubule-base is phosphorylated in res n its function, localizatio	nt, JLP) has also been d endosomal traffi ponse to stress (U ¹ n, or binding prope	en shown to icking (9,10). There V damage etc.) but erties (11-14).	
Background Re	ferences	1. Jagadish, N. et al. (20 2. Bouwmeester, T. et a 3. Kelkar, N. et al. (2009 4. Hsu, C.H. et al. (2010 5. Willoughby, E.A. et a 6. Koushika, S.P. (2008) 7. Beeler, N. et al. (2009 8. Brancho, D. et al. (2009) 9. Ikonomov, O.C. et al 10. Montagnac, G. et a 11. Olsen, J.V. et al. (2000)	2005) <i>Biochem J</i> 389 al. (2004) <i>Nat Cell E</i> 5) <i>Mol Cell Biol</i> 25, 0) <i>Neurodegener D</i> 1. (2003) <i>J Biol Chei</i> 9) <i>Bioessays</i> 30, 10-4 9) <i>Brain Res Bull</i> 80 203) <i>Genes Dev</i> 17, . (2009) <i>J Biol Chen</i> 1. (2009) <i>Curr Biol</i> 1 06) <i>Cell</i> 127, 635-44	, 73-82. <i>iio</i> / 6, 97-105. 2733-43. <i>iis</i> 7, 68-75. <i>m</i> 278, 10731-6. I. , 274-81. 1969-78. <i>m</i> 284, 3750-61. 9, 184-95. 3.			

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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	W: Western Blotting IP: Immunoprecipitation IHC-P: Immunohistochemistry (Paraffin) IF-IC: Immunofluorescence (Immunocytochemistry) FC-FP: Flow Cytometry (Fixed/Permeabilized)			
Cross-Reactivity Key	H: Human M: Mouse R: Rat Mk: Monkey			
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