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Applications: W, IP	Reactivity: H M R	Sensitivity: Endogenous	MW (kDa): 140	Source/Isotype: Rabbit IgG	UniProt ID: #Q8WYL5	Entrez-Gene Id: 54434	
Product Usage Information		Application Western Blotting Immunoprecipitation			Dilution 1:1000 1:100		
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	'Sensitivity SSH1 (E1K3W) Rabbit mAb recognizes endogenous levels of total SSH1 protein. Based on the absence of sequence homology, this antibody is not expected to recognize SSH2 or SSH3.				d on the absence		
Source / Purifi	Purification Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding residues surrounding Pro1018 of human SSH1 protein.			orresponding to			
Background		Cofilin is an evolutionarily conserved, actin-binding protein that severs actin filaments during processes that rely on actin filament dynamics, including cytokinesis, cell migration, invasion, and neuronal development. Actin severing and filament depolymerization are regulated through the controlled cycling of cofilin between the phosphorylated and dephosphorylated forms (1). The kinases LIMK and TESK inactivate cofilin by phosphorylating it at Ser3 (2,3). The slingshot homologs (SSH1, SSH2 and SSH3) and chronophin/PDXP phosphatases remove phosphate from cofilin at Ser3, enabling cofilin binding to actin and filament depolymerization (3). LIMK and SSH1 regulate cofilin activity downstream of neuregulin signaling in Schwann cells (4). Slingshot homolog 1 (SSH1) can also dephosphorylate LIMK kinases, suppressing LIMK phosphorylation of cofilin (5). In addition, SSH1 modulates actin dynamics by stabilizing F-actin and promoting actin bundling independent of its cofilin phosphatase activity (6). SSH1 activity is regulated by phosphorylation and protein-protein interaction through various signaling pathways (1). Binding of					
Background Ro	eferences	 SSH1 to F-actin stimulates its cofilin phosphatase activity (7). 1. Mizuno, K. (2013) <i>Cell Signal</i> 25, 457-69. 2. Toshima, J. et al. (2001) <i>J Biol Chem</i> 276, 31449-58. 3. Huang, T.Y. et al. (2006) <i>Curr Opin Cell Biol</i> 18, 26-31. 4. Sparrow, N. et al. (2012) <i>J Neurosci</i> 32, 5284-97. 5. Soosairajah, J. et al. (2005) <i>EMBO J</i> 24, 473-86. 6. Kurita, S. et al. (2007) <i>Genes Cells</i> 12, 663-76. 7. Kurita, S. et al. (2008) <i>J Biol Chem</i> 283, 32542-52. 					
Species Reactiv	vitv	Species reactivity is de	termined by testing	n in at least one approve	ed application (e.g.	western blot)	
Western Blot E	Buffer	IMPORTANT: For weste dry milk, 1X TBS, 0.1%	ern blots, incubate Tween® 20 at 4°C	e membrane with diluted primary antibody in 5% w/v nonfat with gentle shaking, overnight.			
Applications K	ey	W: Western Blotting IP: Immunoprecipitation					
Cross-Reactivi	ty Key	H: Human M: Mouse R: Rat					
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