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#23292**Merlin/Ezrin/Radixin/Moesin (D1P8I)
Rabbit mAb****Orders:** 877-616-CELL (2355)
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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W, IF-IC	Reactivity: H M R Mk	Sensitivity: Endogenous	MW (kDa): 70 Merlin. 75 Moesin. 80 Ezrin & Radixin.	Source/Isotype: Rabbit IgG	UniProt ID: #P35240	Entrez-Gene Id: 4771
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Product Usage Information	Application Western Blotting Immunofluorescence (Immunocytochemistry)	Dilution 1:1000 1:200
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/Sensitivity	Merlin/Ezrin/Radixin/Moesin (D1P8I) Rabbit mAb recognizes endogenous levels of total merlin, ezrin, radixin, and moesin protein. This antibody immunoprecipitates total merlin protein.	
Source / Purification	Monoclonal antibody is produced by immunizing animals with recombinant protein specific to the carboxy terminus of human merlin protein.	
Background	Neurofibromatosis 2 (NF2) is an autosomal dominant, inherited disorder characterized by the occurrence of vestibular schwannomas, meningiomas, and other nervous system tumors. Both the familial tumors of NF2 and equivalent sporadic tumors found in the general population are caused by inactivation of the <i>NF2</i> tumor suppressor gene. Merlin (moesin, ezrin, and radixin-like protein) is the <i>NF2</i> gene product, displaying striking similarity to ezrin, radixin, and moesin (ERM) proteins. Regulation of merlin (also called schwannomin) and ERM proteins involves intramolecular and intermolecular head-to-tail associations between family members (1). Merlin and ERM proteins act as linkers between the plasma membrane and the cytoskeleton, affecting cell morphology, polarity, and signal transduction (2). Merlin is phosphorylated by the Rac/Cdc42 effector p21-activated kinase (PAK) at Ser518, negatively regulating Rac (3,4).	
Background References	<ol style="list-style-type: none"> 1. Ramesh, V. (2004) <i>Nat. Rev. Neurosci.</i> 5, 462-70. 2. Bretscher, A. et al. (2002) <i>Nat. Rev. Mol. Cell Biol.</i> 3, 586-99. 3. Xiao, G. H. et al. (2002) <i>J. Biol. Chem.</i> 277, 883-6. 4. Kissil, J. L. et al. (2003) <i>Mol. Cell</i> 12, 841-9. 	

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 IF-IC: Immunofluorescence (Immunocytochemistry)
Cross-Reactivity Key	H: Human M: Mouse R: Rat Mk: Monkey
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