

# Merlin Antibody



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**For Research Use Only. Not for Use in Diagnostic Procedures.**

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP	H M R	Endogenous	70	Rabbit	#P35240	4771

<b>Storage</b>	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.
<b>Specificity/Sensitivity</b>	Merlin Antibody detects endogenous levels of merlin. The antibody does not cross-react with related proteins such as ezrin, radixin or moesin.
<b>Source / Purification</b>	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to the sequence of human merlin. Antibodies are purified by protein A and peptide affinity chromatography.
<b>Background</b>	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).
<b>Background References</b>	<ol style="list-style-type: none"> <li>1. Ramesh, V. (2004) <i>Nat. Rev. Neurosci.</i> 5, 462-70.</li> <li>2. Bretscher, A. et al. (2002) <i>Nat. Rev. Mol. Cell Biol.</i> 3, 586-99.</li> <li>3. Xiao, G. H. et al. (2002) <i>J. Biol. Chem.</i> 277, 883-6.</li> <li>4. Kissil, J. L. et al. (2003) <i>Mol. Cell</i> 12, 841-9.</li> </ol>

<b>Species Reactivity</b>	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
<b>Western Blot Buffer</b>	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.
<b>Applications Key</b>	<b>W:</b> Western Blotting <b>IP:</b> Immunoprecipitation
<b>Cross-Reactivity Key</b>	<b>H:</b> Human <b>M:</b> Mouse <b>R:</b> Rat
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