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## Nischarin (D6T4X) Rabbit mAb

Cell Signaling  
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| Applications: | Reactivity: | Sensitivity: | MW (kDa): | Source/Isotype: | UniProt ID: | Entrez-Gene Id: |
|---------------|-------------|--------------|-----------|-----------------|-------------|-----------------|
| WB            | H M         | Endogenous   | 200       | Rabbit IgG      | #Q9Y2I1     | 11188           |

|                                  |   |                           |
|----------------------------------|---|---------------------------|
| <b>Product Usage Information</b> | <b>Application</b><br>Western Blotting  | <b>Dilution</b><br>1:1000 |
| <b>Specificity / Sensitivity</b> | Nischarin (D6T4X) Rabbit mAb recognizes endogenous levels of total nischarin protein. The antibody detects a 60 kDa background band of unknown identity by western blot.  |                           |
| <b>Source / Purification</b>     | Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the amino terminus of human nischarin protein.  |                           |
| <b>Background</b>                | <p>Nischarin (also known as imidazoline receptor antisera-selected protein, IRAS) was first identified through its association with the cytoplasmic domain of integrin <math>\alpha 5</math>, and shown to regulate cell migration and cytoskeletal organization (1).</p> <p>Nischarin regulates Rac-1 signaling (2), as well as the p21-activated kinase (PAK) (3) and cofilin/LIMK pathways (4). Nischarin also interacts with LKB1, regulating the migration and metastatic behavior of breast epithelial cells (5). In addition, nischarin regulates neuronal migration in rat brain (6).</p> <p>Research studies have implicated nischarin in the regulation of invasion and metastasis of breast cancer (7,8). Researchers have shown that nischarin is frequently downregulated in ovarian cancer, and regulates invasion through focal adhesion kinase (FAK) signaling (9).</p> |                           |
| <b>Background References</b>     | <ol style="list-style-type: none"> <li>Alahari, S.K. et al. (2000) <i>J Cell Biol</i> 151, 1141-54.</li> <li>Reddig, P.J. et al. (2005) <i>J Biol Chem</i> 280, 30994-1002.</li> <li>Alahari, S.K. et al. (2004) <i>EMBO J</i> 23, 2777-88.</li> <li>Ding, Y. et al. (2008) <i>Mol Cell Biol</i> 28, 3742-56.</li> <li>Jain, P. et al. (2013) <i>J Biol Chem</i> 288, 15495-509.</li> <li>Ding, Y. et al. (2013) <i>PLoS One</i> 8, e54563.</li> <li>Chen, J. et al. (2015) <i>Mol Med Rep</i> 12, 77-82.</li> <li>Baranwal, S. et al. (2011) <i>J Natl Cancer Inst</i> 103, 1513-28.</li> <li>Li, J. et al. (2015) <i>Mol Cancer Ther</i> 14, 1202-12.</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 nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.  |
| <b>Applications Key</b>       | <b>WB:</b> Western Blotting   |
| <b>Cross-Reactivity Key</b>   | <b>H:</b> human <b>M:</b> mouse <b>R:</b> rat <b>Hm:</b> hamster <b>Mk:</b> monkey <b>Vir:</b> virus <b>Mi:</b> mink <b>C:</b> chicken <b>Dm:</b> D. melanogaster <b>X:</b> Xenopus <b>Z:</b> zebrafish <b>B:</b> bovine <b>Dg:</b> dog <b>Pg:</b> pig <b>Sc:</b> S. cerevisiae <b>Ce:</b> C. elegans <b>Hr:</b> horse <b>GP:</b> Guinea Pig <b>Rab:</b> rabbit <b>All:</b> all species expected  |
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