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Product Information

Anti-p190-B RhoGAP (C-terminal region)
produced in rabbit, affinity isolated antibody

Product Number **P0045**

Product Description

Anti-p190-B RhoGAP (C-terminal region) is produced in rabbit using as the immunogen a synthetic peptide corresponding to a sequence at the C-terminal of human p190-B RhoGAP (GeneID: 394), conjugated to KLH. The corresponding sequence is identical in human p190-B RhoGAP isoforms a/b, and in mouse and rat p190-B RhoGAP. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-p190-B RhoGAP (C-terminal region) specifically recognizes rat and mouse p190-B RhoGAP. The antibody may be used in various immunochemical techniques including immunoblotting (~190 kDa). Detection of the p190-B RhoGAP band by immunoblotting is specifically inhibited by the p190-B RhoGAP immunizing peptide.

Rho GTPase activating proteins (RhoGAPs) are one of the major regulators of the Rho family of small GTPases found in all mammalian cells. These are crucial in cytoskeletal organization, embryogenesis, neuronal development and synaptic function, and in tumor metastasis.[1] p190-B RhoGAP (p190-B, also known as ARHGAP5, RhoGAP5) is a member of the RhoGAP family that functions as negative regulators of Rho activity.[2] An additional member of the p190 RhoGAP family includes p190-A encoded in humans by the *GRLF1* gene. Both p190-A and p190-B proteins are highly expressed in embryonic and adult brain where they play both overlapping and specific roles. Deletion of p190-B in mice results in axonal-tract deficits and neuronal differentiation defects, indicating a central role of p190-B in normal brain development.[3] In addition, p190-B-deficient mice are reduced in size due to impaired insulin and IGF signaling that affect adipogenesis.[4] Several studies indicate a critical interaction between p190-B and IGF signaling pathway during embryonic mammary morphogenesis and epithelial progenitor cell migration.[5] p190-B has been also shown to regulate the expression of MT1-MMP and MMP2 in endothelial cells, thereby affecting matrix remodeling and angiogenesis processes.[6]

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide.

Antibody concentration: ~1.5 mg/mL

Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Store at –20 °C. For continuous use, the product may be stored at 2–8 °C for up to one month. For extended storage, freeze in working aliquots at –20 °C. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilutions should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working antibody concentration of 2-4 μg/mL is recommended using a rat brain extract (S1 fraction) and a C2C12 lysate.

Note: In order to obtain best results in various techniques and preparations, it is recommended to determine optimal working dilutions by titration.

References

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3. Matheson, S.F. et al., *Dev. Neurosci.*, **28**, 538-550 (2006).
4. Sordella, R. et al., *Cell*, **113**, 147-158 (2003).
5. Heckman, B.M. et al., *Dev. Biol.*, **309**, 137-149 (2007).
6. Guegan, F. et al., *J. Cell Sci*, **121**, 2054-2061 (2008).

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