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Product Information

Anti-Nedd9 (C-terminal)
produced in rabbit, affinity isolated antibody

Product Number **SAB4200076**

Product Description

Anti-Nedd9 (C-terminal) is produced in rabbit using as the immunogen a synthetic peptide corresponding to a sequence at the C-terminal of human Nedd9 (GeneID 4739), conjugated to KLH. The corresponding sequence is identical in rat and mouse Nedd9. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-Nedd9 (C-terminal) specifically recognizes human Nedd9. The antibody can be used in several immunochemical techniques including immunoblotting (~115 kDa) and immunofluorescence. Detection of the Nedd9 band by immunoblotting is specifically inhibited by the Nedd9 immunizing peptide.

Nedd9 (also known as Cas-L and HEF1) is an adhesion adapter protein that participates in integrin and growth factor signaling pathways that regulate growth, motility, and apoptosis.[1-3] Nedd9 belongs to a larger family of Cas docking adapter proteins including $p130^{Cas}$ and Efs, and is expressed preferentially in lymphocytes and epithelial cells.

Nedd9 undergoes extensive phosphorylation, a process dependent both on cell adhesion and on integrity of the actin cytoskeleton.[4] In response to integrin receptor binding to the ECM, Nedd9 and other Cas proteins localize to sites of focal adhesions, bind to FAK, and are phosphorylated by FAK and Src kinases. In addition, Nedd9 is regulated at multiple levels in a complex and cell cycle-dependent manner.[1,2] Nedd9 is thought to play an important role in early neuronal differentiation and brain development.[5]

Nedd9 is thought to be a key player in metastatic cancer. Upregulation of Nedd9 expression has been identified as a pro-metastatic stimulus in a number of different solid tumors, and has also been strongly associated with pathogenesis of BCR-Abl-dependent tumors. It is upregulated in ovarian cancer. Overexpression of Nedd9 has been shown to be required for invasion by glioblastoma and to be strongly linked to promotion of melanoma metastasis.[6,7]

Reagent

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

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 1.5-3.0 μg/mL is recommended using extracts of HEK 293T cells overexpressing human Nedd9.

Immunofluorescence: a working antibody concentration of 1-2 μg/mL is recommended using human HS68 cells.

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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6. Kim, M. et al., *Cell*, **125**, 1269-1281 (2006).
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