SIGMA-ALDRICH®

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Product Information

Anti-Septin 9 antibody, Rat monoclonal

Clone 1A6C2, purified from hybridoma cell culture

Catalog Number SAB4200191

Product Description

Anti-Septin 9 (rat IgG2a isotype) is derived from the hybridoma 1A6C2 produced by the fusion of mouse myeloma cells and splenocytes from rat immunized with a synthetic peptide of corresponding to the N-terminus of rat Septin 9 (GeneID: 83788), conjugated to KLH.¹ The antibody is purified from culture supernatant of hybridoma cells grown in a bioreactor.

Anti-Septin 9 recognizes human, mouse, rat and monkey Septin 9. The product may be used in several immunochemical techniques including immunoblotting (~ 72 kDa), immunocytochemistry and immunohistochemistry.¹

The septin family of GTPase proteins has been shown to be important for cell division, cytoskeletal organization, and membrane-remodeling events.² Septin 9 (SEPT9) is a member of the septin family (also designated MSF/eseptin/Sint1) and has been implicated in tumorigenesis. This gene was found to be amplified in mammary gland adenocarcinomas.³ Mutations in this gene cause hereditary neuralgic amyotrophy, also known as neuritis with brachial predilection.⁴ In addition, a chromosomal translocation involving this gene on chromosome 17 and the MLL gene on chromosome 11 results in acute myelomonocytic leukemia.⁵ In addition. Septin 9, shown to be a DNA methylation-based biomarker, effectively discriminated colorectal cancer from normal speciments.6

Reagent

The product is supplied as a solution in 0.01 M phosphate buffered saline pH 7.4, containing 15 mM sodium azide.

Antibody Concentration: ~ 1.0 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, store at 2-8 °C for up to one month. For extended storage, freeze at -20 °C in working aliquots. 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 dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working dilution of 2.5-5.0 μ g/mL is recommended using L929, HeLa, 3T3 and COS-7 cell extracts.

Note: In order to obtain the best results using various techniques and preparations, we recommend determining optimal working dilutions by titration.

References

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- 4. Hannibal, M.C., et al., *Neurology*, **72**, 1755-1759 (2009).
- 5. Gullten, T., et al., *J. Clin. Lab. Anal.*, **23**, 368-371 (2009).
- 6. Grutzmann, R., et al., *PloS ONE*, **3**, e3759 1-8 (2008).

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