SIGMA-ALDRICH®

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Product Information

Monoclonal Anti-SPAG11 antibody produced in mouse

clone 10B4, purified from hybridoma cell culture

Product Number SAB4200676

Product Description

Monoclonal Anti-SPAG11 (mouse IgG1 isotype) is derived from the hybridoma 10B4 produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with a recombinant rat SPAG11 (GeneID: 246305). The isotype is determined by ELISA using Mouse Monoclonal Antibody Isotyping Reagents, Product Number ISO2) The antibody is purified from culture supernatant of hybridoma cells grown in a bioreactor.

Monoclonal Anti-SPAG11 recognizes mouse and rat SPAG11. The product may be used in several immunochemical techniques including immunoblotting (monomer at ~7kDa and multimer at~34kDa) and immunohistochemistry.

SPAG11 also known as Bin1b is a rat epididymisspecific β -defensin with antimicrobial activity.¹ It is expressed specifically in epithelial cells in the middle part of the caput region.²

SPAG11 was reported to be involved in promoting sperm motility due to its capability to bind the sperm head in different regions of the epididymis. In addition, this protein was reported to efficiently suppress colony growth of *Escherichia coli* and other Gram-negative bacteria.³

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: ~ 1.0 mg/mL

Precautions and Disclaimer

This product is 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

For extended storage, freeze at -20 °C in working aliquots. Repeated freezing and thawing or storage in "frost-free" freezer 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 concentration of 4-8 μg/mL is recommended using whole extracts of HEK-293 cells overexpressing rat SPAG11. Best immunoblotting results obtain using PVDF transfer membrane.

<u>Immunohistochemistry</u>: a working dilution of 5-10 µg/mL is recommended using paraffin-embedded rat caput epididimys sections

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

References

- 1. Zhou CX., et al., Nat Cell Biol., 6, 458-64 (2004).
- 2. Cao D., et al., *Biol. Reprod.*, **83**, 1064-1070 (2010).
- 3. Ribeiro, C.M. et al., *Anim. Reprod.*, **9**, 751-759 (2012).

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