

Product Information

Anti-hnRNP-A2/B1 Antibody, Mouse Monoclonal

Clone DP3B3, purified from hybridoma cell culture

R4653

Product Description

Anti-hnRNP-A2/B1 (mouse IgG2a isotype) is derived from the DP3B3 hybridoma produced by the fusion of mouse myeloma cells (SP2/0) and splenocytes from BALB/c mice immunized with recombinant human hnRNP-A2.¹ The isotype is determined by a double diffusion immunoassay using Mouse Monoclonal Antibody Isotyping Reagents, Cat. No. ISO2.

Anti-hnRNP-A2/B1 recognizes human, monkey, bovine, canine, rat, hamster, mouse, and chicken hnRNP-A2/B1.¹ The antibody may be used in ELISA, immunoblotting (approx. 36 kDa), immunoprecipitation, and immunocytochemistry.¹

RNA polymerase II transcripts in the nucleus are in complex with several different proteins called heterogeneous nuclear ribonucleoproteins (hnRNPs). These proteins act in biological activities such as transcription, pre-mRNA processing, cytoplasmic mRNA translation, and turnover.² hnRNPs can be isolated either by immunoprecipitation or by sucrose gradient fractionation of cell extracts. Isolated hnRNPs consist of protein groups named A to U and many of these protein groups consist of more than one isoform.³ The major steady-state proteins of the isolated hnRNP complex are the A1, A2, B1, B2, C1, and C2 with a range of molecular weights (34-43 kDa).³

hnRNP-A2/B1 proteins are located in the nucleus of most tissues' cells; however, the hnRNP-A2 protein is found also in the cytoplasm of skin and esophagus cells. In rat brain, hnRNP-A2/B1 proteins are found in neurons in the cerebral cortices, hippocampal formation, olfactory regions, caudate-putamen, and the supraoptic nucleus of the hypothalamus.⁴ Expression of hnRNP-A2/B1 proteins was found also in lung development and its over expression correlated with lung cancer.⁵

Reagents

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

For continuous use, store at 2-8 °C for up to one month. For extended storage, freeze 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 dilutions should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working antibody concentration of 1-2 µg/mL is recommended using total cell extract from 293T cell line.

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

Millipore
Sigma

References

1. Kamma, H., et al., *Exp. Cell Res.*, **246**, 399-411 (1999).
2. Krecic, A.M., et al., *Curr. Opin. Cell Biol.*, **11**, 363-371 (1999).
3. Choi, Y.D., et al., *Proc. Natl. Acad. Sci. USA*, **81**, 7471-7475 (1984).
4. Mizukami, K., et al., *NeuroReport*, **11**, 3099-3102 (2000).
5. Montuenga, L.M., et al., *Am. J. Respir. Cell Mol. Biol.*, **19**, 554-562 (1998).

Notice

We provide information and advice to our customers on application technologies and regulatory matters to the best of our knowledge and ability, but without obligation or liability. Existing laws and regulations are to be observed in all cases by our customers. This also applies in respect to any rights of third parties. Our information and advice do not relieve our customers of their own responsibility for checking the suitability of our products for the envisaged purpose.

The information in this document is subject to change without notice and should not be construed as a commitment by the manufacturing or selling entity, or an affiliate. We assume no responsibility for any errors that may appear in this document.

Technical Assistance

Visit the tech service page at SigmaAldrich.com/techservice.

Standard Warranty

The applicable warranty for the products listed in this publication may be found at SigmaAldrich.com/terms.

Contact Information

For the location of the office nearest you, go to SigmaAldrich.com/offices.

The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the U.S. and Canada.

MilliporeSigma, and Sigma-Aldrich are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. All other trademarks are the property of their respective owners. Detailed information on trademarks is available via publicly accessible resources.
© 2022 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved.

