

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.

References

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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).

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