

## 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.<sup>1</sup> 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.<sup>1</sup> The antibody may be used in ELISA, immunoblotting (approx. 36 kDa), immunoprecipitation, and immunocytochemistry.<sup>1</sup>

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.<sup>2</sup> 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.<sup>3</sup> 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).<sup>3</sup>

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.<sup>4</sup> Expression of hnRNP-A2/B1 proteins was found also in lung development and its over expression correlated with lung cancer.<sup>5</sup>

## 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

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).

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