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Product Information

Monoclonal Anti-hnRNP-L

Clone 4D11

Purified Mouse Immunoglobulin

Product Number **R 4903**

Product Description

Monoclonal Anti-hnRNP-L (mouse IgG1 isotype) is derived from the 4D11 hybridoma produced by the fusion of mouse myeloma cells (SP2/0 cells) and splenocytes from BALA/c mice immunized with hnRNP proteins and purified by affinity chromatography on ssDNA-agarose.¹ The isotype is determined using Sigma ImmunoType™ Kit (Sigma ISO-1) and by a double diffusion immunoassay using Mouse Monoclonal Antibody Isotyping Reagents (Sigma ISO-2).

Monoclonal Anti-hnRNP-L recognizes human,¹ monkey, bovine, mouse,¹ newt (*Notophthalmus viridescens*),¹ and chicken hnRNP-L. The antibody can be used in various immunochemical techniques including immunoblotting (approx. 68 kDa),¹ ELISA,¹ immunoprecipitation,¹ and immunocytochemistry.¹

RNA polymerase II transcripts in the nucleus are in complex with several proteins called heterogeneous nuclear ribonucleoproteins (hnRNPs). These proteins are important 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.⁴ Isolated hnRNPs consist of protein groups named A to U and many of these protein groups consist of more than one isoform. Group L and M are one of the most abundant groups of proteins and they also migrate closely on 2D gels.^{1,2}

hnRNP-L is involved in splicing regulations,³ internal translation initiation of hepatitis C virus (HCV),⁴ stability of the human vascular endothelial growth factor (VEGF) mRNA under hypoxic growth conditions,⁵ and intron independent mRNA export.⁶

Monoclonal antibodies specific for hnRNP-L are an important tool for studying the role of hnRNP proteins in different cellular processes.

Reagent

Monoclonal Anti-hnRNP-L is supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, and 15 mM sodium azide.

Antibody Concentration: Approx. 2 mg/ml

Precautions and Disclaimer

Due to the sodium azide content, a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS 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 is not recommended. Storage in frost-free freezers is also 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

By immunoblotting, a working antibody concentration of 0.25-0.5 µg/ml is recommended using total cell extract of MDBK cells.

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

References

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