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Product Information

Monoclonal Anti- hnRNP-K/J

Clone 3C2

Purified Mouse Immunoglobulin

Product Number **R 8903**

Product Description

Monoclonal Anti-hnRNP-K/J (mouse IgG2b isotype) is derived from the 3C2 hybridoma produced by the fusion of mouse myeloma cells (SP2/0 cells) and splenocytes from BALB/c mice immunized with hnRNP's purified by oligo (dC) affinity chromatography.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-K/J recognizes human,^{1,6} bovine,¹ hamster,¹ and *Xenopus*¹ hnRNP-K/J. (approx. 60 kDa). The antibody may be used in various immunochemical techniques including ELISA, immunoblotting (approx. 60 kDa),^{1,6} immunoprecipitation,¹ immunocytochemistry,¹ and EMSA supershift.⁶

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. 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.²⁻⁴ hnRNP-K is found both in the nucleus, cytoplasm, and mitochondria, therefore, it was found to be involved in many biological events in the cell like: transcription, chromatin remodeling, splicing and translation. hnRNP-K is regulated by different signaling cascades and can bind kinases. As a consequence, it can mediate signals from the cytoplasm to the nucleus.⁵ Some, but not all of the hnRNP-K interactions and functions are conserved in eukaryotes from yeast to man. However, the mammalian protein seems to play a wider role.⁵

Monoclonal antibodies specific for hnRNP-K/J are an important tool for studying the role of this protein in different biological functions.

Reagent

Monoclonal Anti- hnRNP-K/J is supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 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 hazardous and safe handling practices.

Storage/Stability

For continuous use, store at 2-8 °C for up to one month. For prolonged 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 dilution samples should be discarded if not used within 12 hours.

Product Profile

By immunoblotting, a working antibody concentration of 0.1-0.2 µg/ml is recommended using total cell extract of MBDK cells.

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

References

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