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Product Information

Monoclonal Anti-eIF5A, Clone IF5-88
produced in mouse, purified immunoglobulin

Product Number **E1783**

Product Description

Monoclonal Anti-eIF5A (mouse IgG1 isotype) is derived from the hybridoma IF5-88 produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with a recombinant protein corresponding to a fragment of human eIF5A (GeneID 1984). The isotype is determined using a double diffusion immunoassay using Mouse Monoclonal Antibody Isotyping Reagents, Product Number ISO2.

Monoclonal Anti-eIF5A recognizes human, monkey, dog, rat, and mouse eIF5A. The antibody may be used in various immunochemical techniques including immunoblotting (~17 kDa) and immunocytochemistry.

mRNA processing, transport, localization, and turnover are central to the process of gene expression at the post-transcriptional level. These processes are connected with mRNA degradation. The eukaryotic translation initiation factor 5A (eIF5A) is implicated in both aspects of RNA metabolism. It is a highly conserved protein that undergoes a unique and essential post-translational modification dependent on the polyamine spermidine, called hypusination.[1]

Although eIF5A was originally identified as a translation initiation factor, subsequent studies did not support this role.[2] eIF5A is also implicated in cell proliferation, synthesis of proteins involved in cell cycle control, mRNA decay, and transport of viral mRNAs from nucleus to cytoplasm in association with Rev HIV-I protein.[3-6] Reduction of eIF5A content is implicated in brain aging.[7] Higher eIF5A protein expression levels are present in lung adenocarcinomas tumors showing poor differentiation. These levels are also correlated with poorer survival, suggesting eIF5A as a prognostic marker in lung carcinomas.[8] Furthermore, inhibition of eIF5A hypusination has been shown to be a promising therapy in BCR-ABL-positive leukemias.[9]

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody concentration: ~1.0 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 at –20 °C 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 dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working concentration of 1-2 μg/mL is recommended using 3T3 total cell extract.

Note: In order to obtain best results in various techniques and preparations, it is recommended to determine optimal working dilutions by titration.

References

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