

1-methyladenosine monoclonal antibody

Cat. No. C15200235

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|--|--|
| Type: Monoclonal | Specificity: Human, mouse, other (wide range): positive. |
| Size: 100 µg | Isotype: IgG2bk |
| Concentration: 1 µg/µl | Host: Mouse |
| Lot No.: 004 | Purity: Protein G purified monoclonal antibody. |
| Storage buffer: PBS containing 50% glycerol, does not contain a preservative. | Storage conditions: Store at -20°C. |
| Precautions: This product is for research use only. Not for use in diagnostic or therapeutic procedures. | |

Last Data Sheet Update: February 15, 2018

Description

Other names: m1A, 1mA, m1Ado

Monoclonal antibody raised in mouse against 1-methyladenosine (m1A) conjugated to KLH.

Applications

| Applications | Suggested dilution | References |
|--------------|--------------------|------------|
| IP | 15 µg per IP | Fig 1 |
| IF | 1:1,000 | Fig 2 |
| IHC | 1:10,000 | Fig 3 |

Target Description

N1-methyladenosine (m1A) is one of the major modified nucleosides present in most eukaryotic tRNAs but also has been found yeast rRNAs. The presence of the m1A modification in tRNA's influences the structural stability and its binding to the polysome during translation. m1A is elevated in the urinary excretion of patients with various cancers and AIDS. Increased serum levels of m1A are also detected under stress conditions.

Validation data

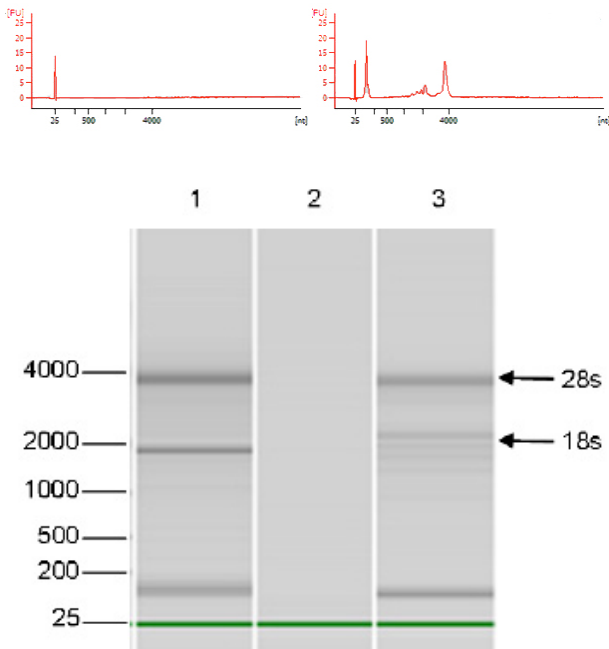


Figure 1. Immunoprecipitation using the Diagenode monoclonal antibody directed against m1A

Immunoprecipitation was performed on 40 µg total RNA isolated from HEK293 cells using 15 µg of the Diagenode monoclonal antibody against m1A (cat. No. C15200235) or with an equal amount of mouse IgG2b, used as a negative control. The immunoprecipitated RNA was subsequently analysed on a Bioanalyzer. Figure 1 shows the Bioanalyzer profile obtained with the negative control (upper left) and the m1A antibody (upper right). The lower figure shows the gel image for the input, the negative IgG2b control and the m1A antibody (lane 1, 2 and 3 respectively). The marker (in bp) is shown on the left, the position of the 28s and 18s ribosomal RNA is indicated on the right.

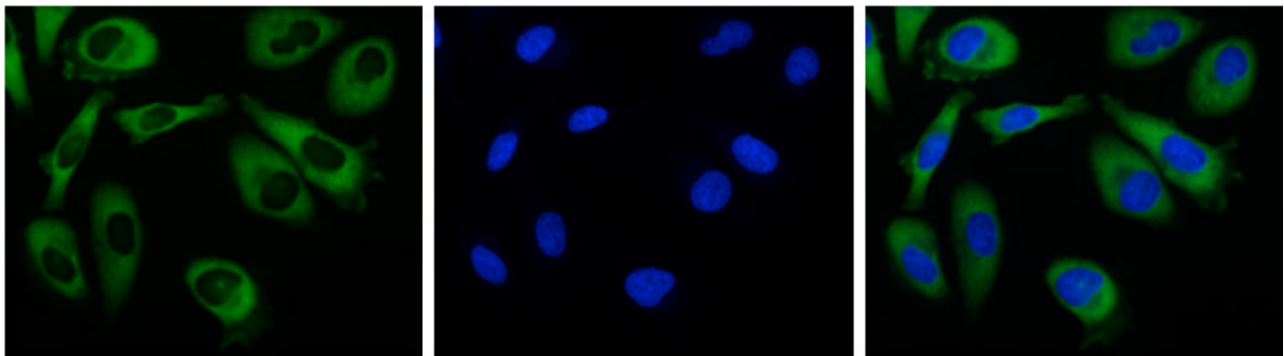


Figure 2. Immunofluorescence using the Diagenode monoclonal antibody directed against m1A

HeLa cells were stained with the Diagenode monoclonal antibody against m1A (cat. No. C15200235). Cells were fixed with 4% formaldehyde for 20 min at RT, permeabilized with 0.5% Triton X-100 for 5 min at RT and blocked with PBS containing 1% BSA. The cells were immunofluorescently labeled with the m1A antibody (left) diluted 1:1,000 in blocking solution followed by a goat anti-mouse antibody conjugated to Alexa488. The middle panel shows staining of the nuclei with Hoechst33342. A merge of the two stainings is shown on the right.

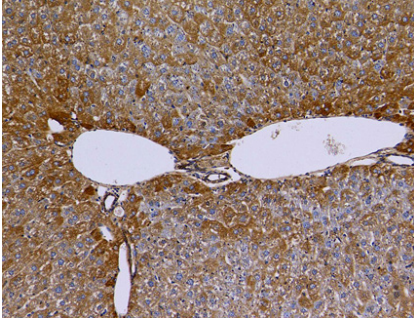


Figure 3. Immunohistochemistry using the Diagenode monoclonal antibody directed against m1A

Paraffin-embedded mouse liver tissue was analysed by immunohistochemical analysis using the Diagenode monoclonal antibody against m1A (cat. No. C15200235) diluted 1:10,000 (brown). The slides were counterstained with Hematoxylin (blue).