Pseudouridine monoclonal antibody

Cat. No. C15200247

Type: Monoclonal	Specificity: Human, other (wide range): positive.
Size: 50 µg	Isotype: IgG2b
Concentration: 1.44 µg/µl	Host: Mouse
Lot No.: 001	Purity: Protein A purified monoclonal antibody.
Storage buffer: PBS containing 0.05% sodium azide.	Storage conditions: Store at -20°C; for long storage, store at -80°C. Avoid multiple freeze-thaw cycles.
Precautions: This product is for research use only. Not for use in diagnostic or therapeutic procedures.	

Last Data Sheet Update: February 27, 2019

Description

Other names: psU

Monoclonal antibody raised in mouse against pseudouridine (psU) conjugated to BSA.

Applications

Applications	Suggested dilution	References
RIP*	5 µg per IP	Fig 1, 2

* Please note that the optimal antibody amount per IP should be determined by the end-user. We recommend testing 2-10 µg per IP.

Target Description

Pseudouridine (psU) was the first modified base that was identified in RNA. It is mainly present in non-coding RNAs such as tRNA, rRNA, snRNA and snoRNA but was also found in some mRNAs in both yeast and human. The presence of pseudouridine enhances the structural stability of RNA and is thought to affect rRNA processing, translation and pre-mRNA splicing.

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Validation data

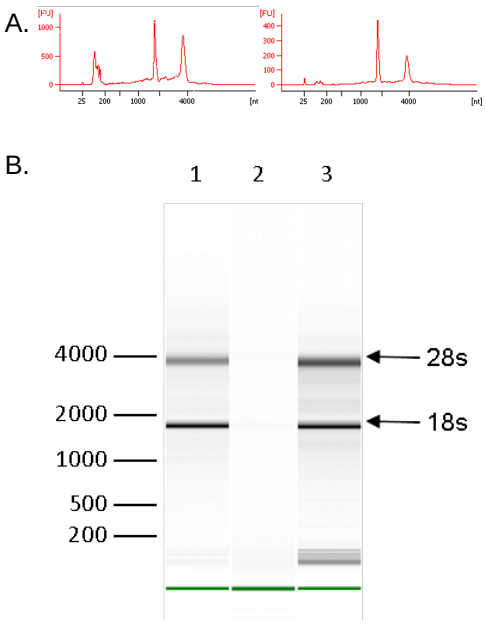

Figure 1. RNA immunoprecipitation using the Diagenode monoclonal antibody directed against psU

RNA immunoprecipitation (RIP) was performed on 40 µg total RNA isolated from HeLa cells using 5 µg of the Diagenode monoclonal antibody against psU (Cat. No. C15200247) or with an equal amount of mouse IgG, used as a negative control. The immunoprecipitated RNA was subsequently analysed on a Bioanalyzer. Figure 1A shows the Bioanalyzer profile obtained with the psU antibody (right) The left panel shows the input. Figure 1B shows the gel image for the psU antibody, the IgG negative control and the input (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.

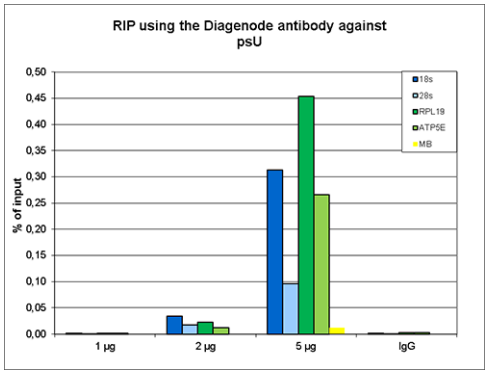

Figure 2. RIP using the Diagenode monoclonal antibody directed against psU

RIP assays were performed on 40 µg total RNA from human HeLa cells using the Diagenode antibody against psU (Cat. No. C15200247). A titration of the antibody consisting of 1, 2 and 5 µg per RIP experiment was analysed. IgG (2 µg/IP) was used as negative IP control. QRT-PCR was performed with primers for the 18 and 28s rRNA genes, for the RPL19 and ATP5E mRNA, shown to contain a psU residue and for the MB gene, used as a negative control. Figure 2 shows the recovery, expressed as a % of input (the relative amount of immunoprecipitated DNA compared to input DNA after qPCR analysis).

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