For Research Use Only

Pseudouridine Monoclonal antibody

Catalog Number:68578-1-Ig

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Basic Information

Catalog Number:
68578-1-Ig

Size:
150ul , Concentration: 1000 μg/ml by Nanodrop;

Source:
Mouse

Isotype:
IgG1

GenBank Accession Number:

GeneID (NCBI):

Full Name:

Purification Method:
Protein G purification

CloneNo.:
1G7C7

Recommended Dilutions:
ELISA 1:2000-1:20000
Dot Blot 1:1000-1:4000

Applications

Tested Applications:
Dot Blot, ELISA

Species Specificity:
Human

Positive Controls:

ELISA : Pseudouridine,

Dot Blot : RNA,

Background Information

Pseudouridine is an isomer of the nucleoside uridine in which the uracil is attached via a carbon-carbon instead of a nitrogen-carbon glycosidic bond. Pseudouridine is the most abundant RNA modification in cellular RNA (PMID: 29104216). After transcription and following synthesis, RNA can be modified with over 100 chemically distinct modifications. These can potentially regulate RNA expression post-transcriptionally, in addition to the four standard nucleotides and play a variety of roles in the cell including translation, localization and stabilization of RNA. Pseudouridine in rRNA and tRNA has been shown to fine-tune and stabilize the regional structure and help maintain their functions in mRNA decoding, ribosome assembly, processing and translation (PMID: 10902565, PMID: 23391857, PMID: 28045575). Pseudouridine in snRNA has been shown to enhance spliceosomal RNA-pre-mRNA interaction to facilitate splicing regulation (PMID 27268497).

Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

***** 20ul sizes contain 0.1% BSA**

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
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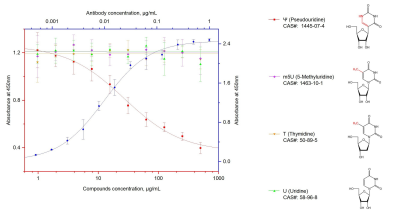
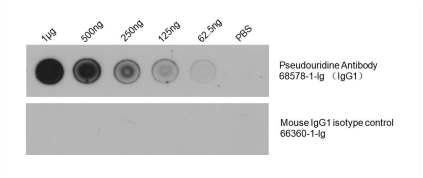
Selected Validation Data



Indirect ELISA and competitive ELISA results show that this antibody is specific to Pseudouridine. Indirect ELISA was performed by coating BSA conjugated Pseudouridine at 10ng/well followed by blocking with 1% BSA. Serial diluted primary antibody was added to the plates and incubated at 37°C. HRP-goat anti-mouse was used for detection. Competitive ELISA was performed similarly except that different concentration of



Total RNA was isolated from HeLa cell line and was dotted to NC membrane at different amount as indicated above the dots. The membrane was blocked with BSA and blotted with Pseudouridine antibody 68578-1-Ig at 1:2000 followed by incubation of HRP-goat anti-mouse secondary antibody. Signal was developed by ECL substrate. A parallel dot blot was performed using mouse IgG1 isotype control antibody 66360-1-Ig at the same dose.