For Research Use Only

N4-acetylcytidine Monoclonal antibody

Catalog Number: 68498-1-lg



Basic Information

Catalog Number:

GenBank Accession Number:

Purification Method:

68498-1-lg

GeneID (NCBI):

Protein G purification

Size:

Full Name:

CloneNo.: 3C2C2

150ul, Concentration: 1000 ug/ml by Nanodrop:

utt Name.

Recommended Dilutions:

Source:

Mouse

Isotype:

Dot Blot 1:1000-1:4000

Applications

Tested Applications:

Dot Blot, ELISA

Species Specificity: chemical compound

Positive Controls:

Dot Blot: RNA isolate HeLa cells,

Background Information

N4-Acetylcytidine, CasNo. 3768-18-1, is a modified nucleoside and endogenous urinary nucleoside product of the degradation of tRNA, 18s rRNA and mRNA. N4-Acetylcytidine is a biological marker for various cancers with elevated concentrations present in urine. N4-Acetylcytidine is also a partially protected cytidine and therefore can be used as a synthetic building block to prepare further derivatized nucleosides such as 2',3'-dideoxycytidine. NAT10 catalyzes the formation of N4-acetylcytidine (ac4C) modification on mRNAs, 18S rRNA and tRNAs.

Protocol for Dot Blot:

https://www.ptglab.com/protocol/68498-1-lgDotBlot.pdf

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

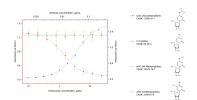
Storage Buffer

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

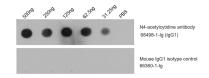
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

Selected Validation Data



Indirect ELISA and competitive ELISA results show that this antibody is specific to ac4C (N4-acetylcytidine). Indirect ELISA (blue curve, refer to top X-right Y axis) was performed by coating BSA conjugated ac4C at 50ng/well followed by blocking with 5% non fat milk. 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



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 5% milk and blotted with N4-acetylcytidine antibody 68498-1-1g 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 1gG1 isotype control Monoclonal antibody 66360-1-1g at the same dose.