

For Research Use Only

Biotin-conjugated 5-methylcytosine Monoclonal antibody

Catalog Number: Biotin-68301



Basic Information

Catalog Number:

Biotin-68301

GenBank Accession Number:

GeneID (NCBI):

Size:

100ul , Concentration: 1000 ug/ml by
Nanodrop;

Full Name:

Source:

Mouse

Isotype:

IgG2b

Purification Method:

Protein A purification

CloneNo.:

2C9G9

Recommended Dilutions:

IHC: 1:1500-1:6000

Applications

Tested Applications:

IHC

Positive Controls:

IHC : mouse testis tissue,

Species Specificity:

5mc, chemical compound, m5c

**Note-IHC: suggested antigen retrieval with
TE buffer pH 9.0; (*) Alternatively, antigen
retrieval may be performed with citrate
buffer pH 6.0**

Background Information

In eukaryotes, 5-methylcytosine in DNA (5mC) and its oxidized derivatives (5-hydroxymethylcytosine (5hmC), 5-formylcytosine (5fC), and 5-carboxylcytosine (5caC)) are the most prominent modifications and have been suggested to contribute to epigenetic gene regulation through a variety of different mechanisms. m5C has also been found in mRNA, rRNA and tRNA of representative organisms from all kinds of species. As reversible epigenetic modifications, m5C modifications of RNA affect the fate of the modified RNA molecules and play important roles in various biological processes including RNA stability control, protein synthesis, and transcriptional regulation (PMID: 35365216). This antibody can recognize both 5mC in DNA and m5C in RNA.

Protocol for Dot Blot:

<https://www.ptglab.com/protocol/68301-1-IgDotBlot.pdf>

Storage

Storage:

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffer:

PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3

Aliquoting is unnecessary for -20°C storage

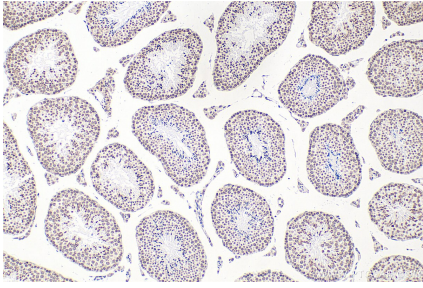
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free
in USA), or 1(312) 455-8498 (outside USA)

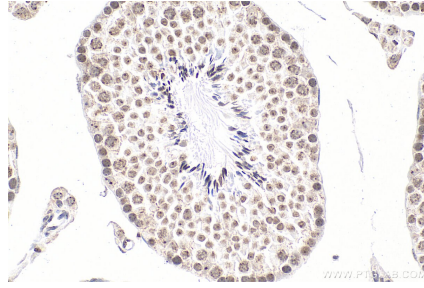
E: proteintech@ptglab.com
W: ptglab.com

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Selected Validation Data



Immunohistochemical analysis of paraffin-embedded mouse testis tissue slide using Biotin-68301 (5-methylcytosine antibody) at dilution of 1:3000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse testis tissue slide using Biotin-68301 (5-methylcytosine antibody) at dilution of 1:3000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).