

A18870

Leader in Biomolecular Solutions for Life Science



5-methylcytidine/m5C Rabbit pAb

Catalog No.: A18870

Basic Information

Observed MW

Calculated MW

Category

Small Molecule-specific Antibody

Applications

ELISA,DB

Cross-Reactivity

Species independent

Background

RNA methylation plays a significant regulatory role in various of physiological activities and it has gradually become a hotspot of epigenetics in the past decade. 2'-O-methyladenosine (Am), 2'-O-methylguanosine (Gm), 2'-O-methylcytidine (Cm), 2'-O-methyluridine (Um), N 6-methyladenosine (m6A), N 1-methylguanosine (m1G), 5-methylcytidine (m5C), and 5-methyluridine (m5U) are representative 2'-O-methylation and base-methylation modified epigenetic marks of RNA. 5-Methylcytosine (5mC), a modified nucleobase derived from cytosine, is present in both DNA and RNA molecules. 5mC in DNA is an essential epigenetic mark associated with gene silencing and genome stability during embryonic development. 5mC in ribonucleoside, called 5-methylcytidine (m5C), is involved in structural stability, aminoacylation and codon recognition of tRNA. In rRNA, m5C affects translational fidelity and tRNA recognition. m5C-modified nucleobase also have been identified in mRNA and other non-coding RNA but the biological functions are still unclear. m5C is detected not only in tissues and cells but also in urine. It is reported that the levels of m5C change in urine or tissues from patients with various diseases such as bladder, breast and colon cancers.

Recommended Dilutions

DB 1:500 - 1:2000

ELISA Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

Immunogen Information

Gene ID

Swiss Prot

Immunogen

m5C

Synonyms

Contact

 www.abclonal.com

Product Information

Source

Rabbit

Isotype

IgG

Purification

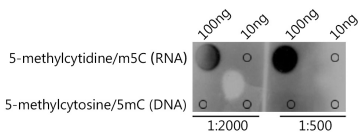
Affinity purification

Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.05% proclin300, 50% glycerol, pH7.3.

Validation Data



The m5C rabbit polyclonal antibody (A18870) are tested in Dot Blot against 5-methylcytidine(m5C) and 5-methylcytosine(5mC).