

AbFlex® N6-Methyladenosine (m6A) antibody (rAb)

Catalog Nos: 91261, 91262

RRID: AB_2892216

Application(s): DB, IP

Reactivity: Human, Mouse, Not Species Specific

Quantities: 100 µg, 10 µg

Purification: Protein A Chromatography

Host: Mouse

Isotype: IgG2a

Background: AbFlex® antibodies are recombinant antibodies (rAbs) that have been generated using defined DNA sequences to produce highly specific, reproducible antibodies. Each AbFlex antibody contains a 6xHis Tag, a Biotinylation Tag for enzymatic biotin conjugation using the biotin ligase, BirA, and a sortase recognition motif (LPXTG) to attach a variety of labels directly to the antibody including fluorophores, enzymatic substrates (HRP, AP), peptides, drugs as well as solid supports. AbFlex® N6-Methyladenosine (m6A) antibody was expressed as full-length IgG with mouse immunoglobulin heavy and light chains (IgG2a isotype) in mammalian 293 cells.

N6-Methyladenosine (m6A) is an RNA modification on the N-6 position of adenosine. This modification has been found to be abundant in the 3' UTR and stop codons of mammalian mRNA. m6A is associated with miRNA binding sites suggesting a potential role in epigenetic gene regulation. FTO and ALKBH are demethylases for 6-methyladenosine while a multiprotein complex that includes METTL3 functions as the methyltransferase. Recent findings revealed that m6A is also present on metazoan DNA, suggesting a genuine epigenetic role for this modification in the context of DNA as well.

Immunogen: This antibody was raised against N6-methyladenosine conjugated to BSA.

Buffer: Purified IgG in 140 mM Hepes, pH 7.5, 70 mM NaCl, 32 mM NaOAc, 0.035% sodium azide, 30% glycerol. Sodium azide is highly toxic.

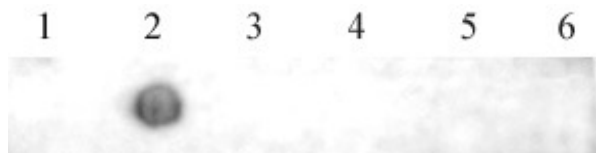
Application Notes:

Validated Applications:

Dot Blot

Immunoprecipitation (IP): 5 - 10 µg

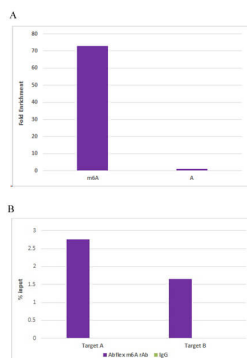
Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Upon receipt, unconjugated antibodies may be stored at -20°C for up to 2 years. Fluorophore- & enzyme-conjugated antibodies should be stored at 4°C. Fluorophore-conjugated antibodies should be protected from light. Keep reagents on ice when not in storage; to avoid repeated freeze/thaw cycles, we recommend aliquoting items that will be stored frozen into single-use fractions prior to freezing. This product is for research use only and is not for use in diagnostic procedures. This product is guaranteed for 6 months from date of arrival.



AbFlex® N6-Methyladenosine (m6A) antibody tested by Dot blot.

3.3 ng of single-stranded DNA oligonucleotides were spotted on to a positively charged nylon membrane and blotted with AbFlex N-6-methyladenosine recombinant antibody (1 µg/ml dilution).

1. unmethylated sequence 1
2. single 6-methyl-adenosine in middle of sequence 1
3. unmethylated sequence 2
4. unmethylated sequence 3
5. single 1-methyl-adenosine in middle of sequence 3



AbFlex® N6-Methyladenosine (m6A) antibody tested by RNA immunoprecipitation.

(A) *In vitro* RNA transcripts were generated containing either 0 or 10% of the m6A modified base or the A unmodified base and were spiked into 10 µg of total RNA. IP was performed using 10 µg Abflex N6-Methyladenosine antibody followed by Real Time-qPCR. (B) IP was performed using 5 µg Abflex N6-Methyladenosine antibody and 30 µg of total RNA (fragmented to 200 bp) from human hematopoietic stem cells followed by Real Time-qPCR on known methylated RNA. Data was provided courtesy of Dr. Alexandra Patmanidi in Prof. Dr. Achim Leutz's lab, Max-Delbrück-Centrum für Molekulare Medizin (MDC).