

PRODUCT INFORMATION



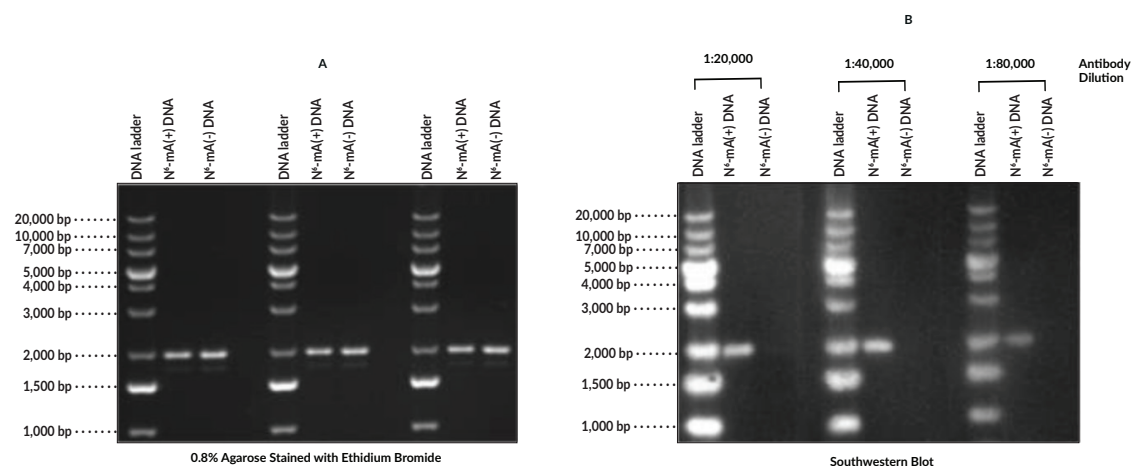
N⁶-Methyladenosine Polyclonal Antibody

Item No. 18337

Overview and Properties

Contents:	This vial contains 100 µg of protein A-purified polyclonal antibody.
Synonym:	m ⁶ A
Immunogen:	N ⁶ -Methyladenosine conjugated to KLH
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥3 years
Storage Buffer:	TBS, pH 7.4, with 50% glycerol, 0.1% BSA, and 0.02% sodium azide
Host:	Rabbit
Applications:	ELISA and Southwestern dot blot; the recommended starting dilution is 1:200. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Images



A. 1,921 bp EcoRV fragments isolated from N⁶-methyladenosine free and N⁶-methyladenosine containing Lambda DNA (NEB #N30135 and #N30115, respectively) were electrophoresed in 0.8% agarose gel.

B. The gel in panel A was blotted to nitrocellulose under denaturing conditions. The blots were probed with N⁶-Methyladenosine Polyclonal Antibody at the dilutions shown.

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

N⁶-Methyladenosine (m⁶A) is the most prevalent internal modification that occurs in the messenger RNAs (mRNAs) of most eukaryotes and has been linked to effects on mRNA fate. The process shares similarities to histone methylation in that the modification is installed by m⁶A methylation "writers", detected by methylation-specific "readers", and can be reversed by demethylation "erasers". The m⁶A modification has been found to be highly conserved around stop codons, in 3'-untranslated region, and within long external exons in both human and mouse cells.¹ The process of regulating m⁶A modifications in mammalian mRNA has been linked to disease, where fat mass and obesity-associated (FTO) has been reported to be an obesity risk gene.¹ FTO is an m⁶A demethylase and polymorphisms that result in increased FTO expression are associated with increased body mass and risk of obesity. Cayman's N⁶-Methyladenosine Polyclonal Antibody can be used for ELISA and Southwestern dot blot applications.

Reference

1. Fu, Y., Jia, G., Pang, X., *et al.* FTO-mediated formation of N⁶-hydroxymethyladenosine and N⁶-formyladenosine in mammalian RNA. *Nat. Commun.* **4**, 1798 (2013).

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