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YTHDF1 Rabbit mAb
Catalog # AP76902

Specification

YTHDF1 Rabbit mAb - Product Information

Application	**WB, IP**
Primary Accession	P59326
Reactivity	**Human, Hamster**
Host	**Rabbit**
Clonality	**Monoclonal Antibody**
Calculated MW	**60879**

YTHDF1 Rabbit mAb - Additional Information

Gene ID 228994

Other Names
Ythdf1

Dilution
WB~~1/500-1/1000
IP~~N/A

Format
Liquid

YTHDF1 Rabbit mAb - Protein Information

Name Ythdf1 {ECO:0000303|PubMed:30401835, ECO:0000312|MGI:MGI:1917431}

Function
Specifically recognizes and binds N6-methyladenosine (m6A)- containing mRNAs, and regulates their stability (PubMed:30401835, PubMed:32943573). M6A is a modification present at internal sites of mRNAs and some non-coding RNAs and plays a role in mRNA stability and processing (PubMed:30401835, PubMed:32943573). Acts as a regulator of mRNA stability by promoting degradation of m6A-containing mRNAs via interaction with the CCR4-NOT complex (By similarity). The YTHDF paralogs (YTHDF1, YTHDF2 and YTHDF3) share m6A-containing mRNAs targets and act redundantly to mediate mRNA degradation and cellular differentiation (PubMed:32943573). Required to facilitate learning and memory formation in the hippocampus by binding to m6A-containing neuronal mRNAs (PubMed:30401835). Acts as a regulator of axon guidance by binding to m6A-containing ROBO3 transcripts (PubMed:30843071). Acts as a negative regulator of antigen cross-presentation in myeloid dendritic cells (PubMed:<a

href="http://www.uniprot.org/citations/30728504" target="_blank">30728504). In the context of tumorigenesis, negative regulation of antigen cross-presentation limits the anti-tumor response by reducing efficiency of tumor-antigen cross-presentation (PubMed:30728504). Promotes formation of phase-separated membraneless compartments, such as P-bodies or stress granules, by undergoing liquid-liquid phase separation upon binding to mRNAs containing multiple m6A-modified residues: polymethylated mRNAs act as a multivalent scaffold for the binding of YTHDF proteins, juxtaposing their disordered regions and thereby leading to phase separation (By similarity). The resulting mRNA-YTHDF complexes then partition into different endogenous phase-separated membraneless compartments, such as P-bodies, stress granules or neuronal RNA granules (By similarity).

Cellular Location
Cytoplasm. Cytoplasm, P-body {ECO:0000250|UniProtKB:Q9BYJ9}. Cytoplasm, Stress granule {ECO:0000250|UniProtKB:Q9BYJ9}

Tissue Location
In brain, preferentially expressed in the hippocampus.

YTHDF1 Rabbit mAb - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

YTHDF1 Rabbit mAb - Images