

**YTHDF1 Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP50608****Specification**

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**YTHDF1 Antibody - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">O9BYJ9</a>
Reactivity	<b>Human, Mouse, Rat</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Calculated MW	<b>61,21 KDa</b>
Antigen Region	<b>3-31</b>

**YTHDF1 Antibody - Additional Information****Gene ID** 54915**Other Names**

YTH domain-containing family protein 1, Dermatomyositis associated with cancer putative autoantigen 1, DACA-1, YTHDF1, C20orf21

**Dilution**

WB~~ 1:1000

**Format**Rabbit IgG in phosphate buffered saline (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.**Storage Conditions**

-20°C

**YTHDF1 Antibody - Protein Information****Name** YTHDF1 {ECO:0000303|Ref.4, ECO:0000312|HGNC:HGNC:15867}**Function**

Specifically recognizes and binds N6-methyladenosine (m6A)- containing mRNAs, and regulates their stability (PubMed: [24284625](http://www.uniprot.org/citations/24284625)), PubMed: [26318451](http://www.uniprot.org/citations/26318451), PubMed: [32492408](http://www.uniprot.org/citations/32492408), PubMed: [32492408](http://www.uniprot.org/citations/32492408)). 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: [24284625](http://www.uniprot.org/citations/24284625), PubMed: [32492408](http://www.uniprot.org/citations/32492408)). Acts as a regulator of mRNA stability by promoting degradation of m6A- containing mRNAs via interaction with the CCR4-NOT complex (PubMed: [32492408](http://www.uniprot.org/citations/32492408), PubMed: [32492408](http://www.uniprot.org/citations/32492408)). The YTHDF paralogs (YTHDF1, YTHDF2 and YTHDF3) shares

m6A-containing mRNAs targets and act redundantly to mediate mRNA degradation and cellular differentiation (PubMed:<a href="http://www.uniprot.org/citations/28106072" target="\_blank">28106072</a>, PubMed:<a href="http://www.uniprot.org/citations/32492408" target="\_blank">32492408</a>). Required to facilitate learning and memory formation in the hippocampus by binding to m6A-containing neuronal mRNAs (By similarity). Acts as a regulator of axon guidance by binding to m6A- containing ROBO3 transcripts (By similarity). Acts as a negative regulator of antigen cross-presentation in myeloid dendritic cells (By similarity). In the context of tumorigenesis, negative regulation of antigen cross-presentation limits the anti-tumor response by reducing efficiency of tumor-antigen cross-presentation (By similarity). 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 (PubMed:<a href="http://www.uniprot.org/citations/31292544" target="\_blank">31292544</a>, PubMed:<a href="http://www.uniprot.org/citations/31388144" target="\_blank">31388144</a>, PubMed:<a href="http://www.uniprot.org/citations/32451507" target="\_blank">32451507</a>). The resulting mRNA-YTHDF complexes then partition into different endogenous phase-separated membraneless compartments, such as P-bodies, stress granules or neuronal RNA granules (PubMed:<a href="http://www.uniprot.org/citations/31292544" target="\_blank">31292544</a>).

### Cellular Location

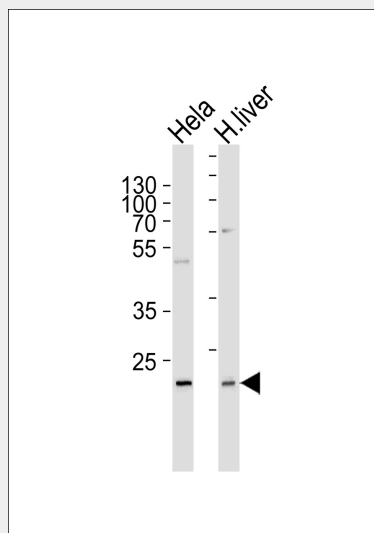
Cytoplasm. Cytoplasm, P-body. Cytoplasm, Stress granule

### YTHDF1 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### YTHDF1 Antibody - Images



Western blot analysis of lysates from Hela cell line and human liver tissue lysate(from left to right),using YTHDF1 Antibody(AP50608). AP50608 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.Lysates at 35ug per lane.

#### **YTHDF1 Antibody - Background**

Specifically recognizes and binds N6-methyladenosine (m6A)-containing RNAs. M6A is a modification present at internal sites of mRNAs and some non-coding RNAs and plays a role in the efficiency of mRNA splicing, processing and stability.

#### **YTHDF1 Antibody - References**

Ota T.,et al.Nat. Genet. 36:40-45(2004).  
Deloukas P.,et al.Nature 414:865-871(2001).  
Onouchi H.,et al.Submitted (FEB-2001) to the EMBL/GenBank/DDBJ databases.  
Bechtel S.,et al.BMC Genomics 8:399-399(2007).  
Daub H.,et al.Mol. Cell 31:438-448(2008).