

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

YTHDF1 Antibody - Product Information

Application	WB
Primary Accession	O9BYJ9
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	61,21 KDa
Antigen Region	3-31

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

FormatRabbit IgG in phosphate buffered saline (without Mg²⁺ and Ca²⁺), 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, PubMed:26318451, PubMed:32492408, PubMed:39900921). 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, PubMed:32492408). Acts as a regulator of mRNA stability by promoting degradation of m6A-containing mRNAs via interaction with the CCR4-NOT complex (PubMed:32492408).

target="_blank">32492408). The YTHDF paralogs (YTHDF1, YTHDF2 and YTHDF3) shares m6A-containing mRNAs targets and act redundantly to mediate mRNA degradation and cellular differentiation (PubMed:28106072, PubMed:32492408). 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:31292544, PubMed:31388144, PubMed:32451507). 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:31292544).

Cellular Location

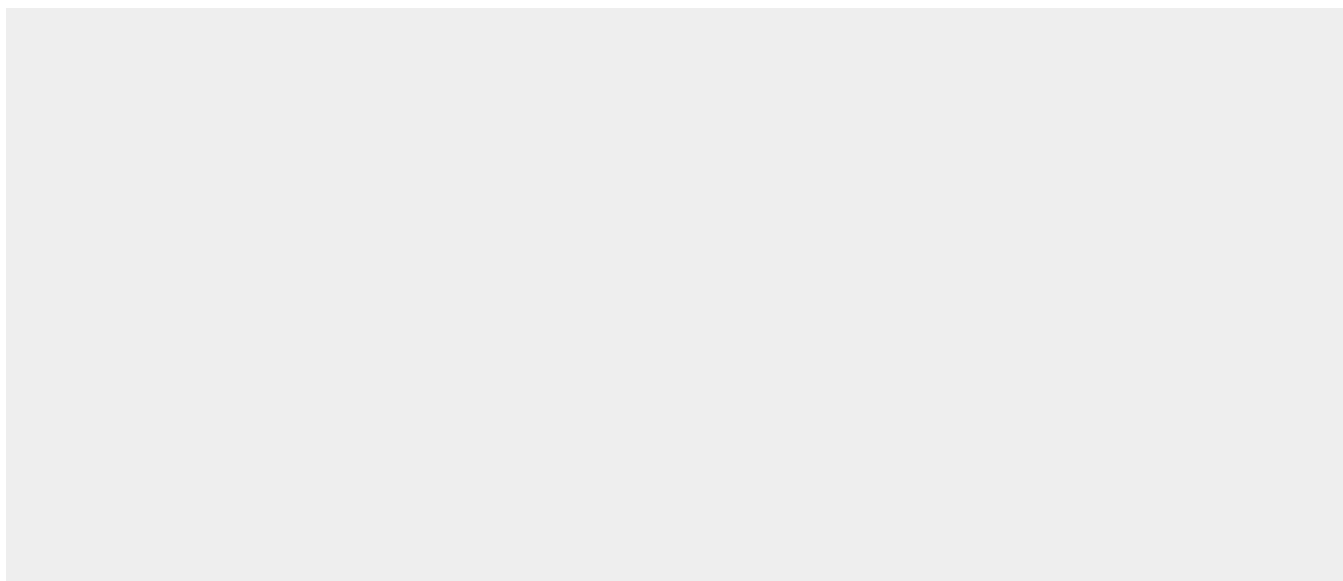
Cytoplasm. Cytoplasm, P-body. Cytoplasm, Stress granule

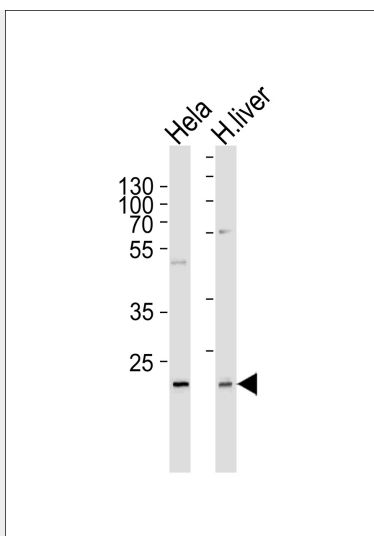
YTHDF1 Antibody - Protocols

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 35 µg 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).