

**YTHDF1 Antibody (aa1-50)**  
**Rabbit Polyclonal Antibody**  
**Catalog # ALS15978****Specification****YTHDF1 Antibody (aa1-50) - Product Information**

Application	WB, IHC-P, E
Primary Accession	<a href="#">Q9BYJ9</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	61kDa KDa
Dilution	WB~~1:1000 IHC-P~~N/A E~~N/A

**YTHDF1 Antibody (aa1-50) - Additional Information****Gene ID** 54915**Other Names**

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

**Target/Specificity**

YTHDF1 Antibody detects endogenous levels of total YTHDF1 protein.

**Reconstitution & Storage**

Store at -20°C for up to one year.

**Precautions**

YTHDF1 Antibody (aa1-50) is for research use only and not for use in diagnostic or therapeutic procedures.

**YTHDF1 Antibody (aa1-50) - 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:<a href="http://www.uniprot.org/citations/24284625" target="\_blank">24284625</a>, PubMed:<a href="http://www.uniprot.org/citations/26318451" target="\_blank">26318451</a>, PubMed:<a href="http://www.uniprot.org/citations/32492408" target="\_blank">32492408</a>, PubMed:<a href="http://www.uniprot.org/citations/39900921" target="\_blank">39900921</a>). 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:<a href="http://www.uniprot.org/citations/24284625" target="\_blank">24284625</a>, PubMed:<a href="http://www.uniprot.org/citations/32492408" target="\_blank">32492408</a>). Acts as a

regulator of mRNA stability by promoting degradation of m6A-containing mRNAs via interaction with the CCR4-NOT complex (PubMed:<a href="http://www.uniprot.org/citations/32492408" target="\_blank">32492408</a>). 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

#### Volume

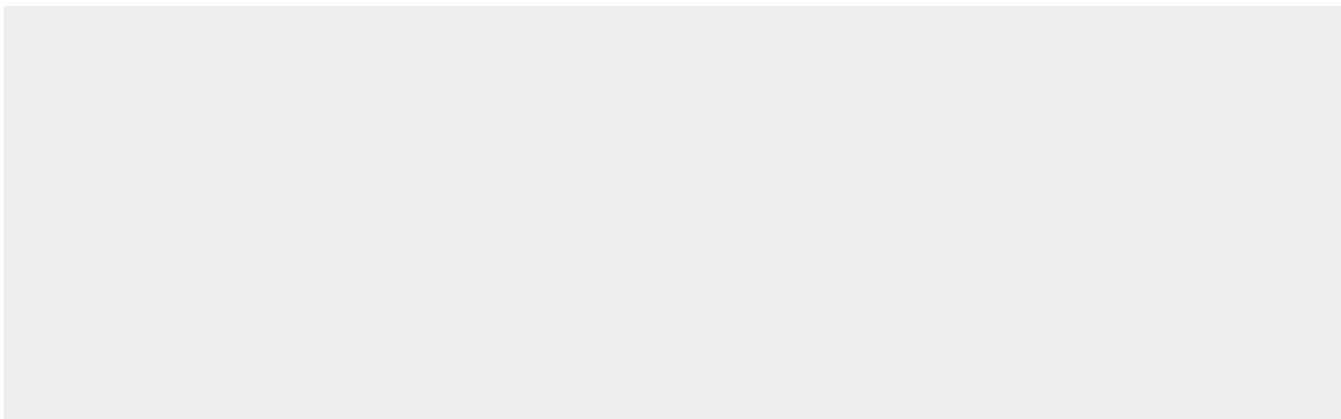
50 µl

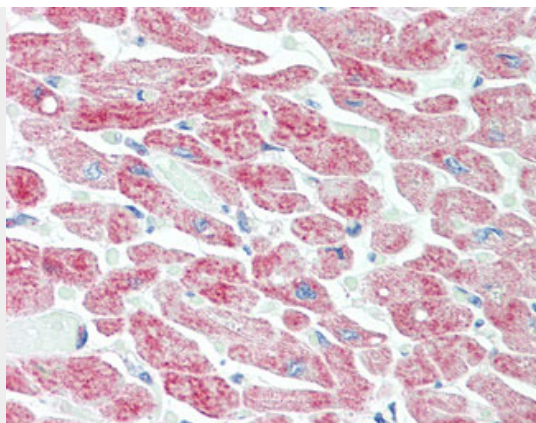
#### YTHDF1 Antibody (aa1-50) - Protocols

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 (aa1-50) - Images





Anti-YTHDF1 antibody IHC staining of human heart.

#### **YTHDF1 Antibody (aa1-50) - 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 (aa1-50) - 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).