

# YTHDF1 / YTHDF2 Monoclonal antibody

Catalog Number: 68416-1-Ig

## Basic Information

**Catalog Number:**

68416-1-Ig

**Size:**

1000 µg/ml

**Source:**

Mouse

**Isotype:**

IgG2a

**Immunogen Catalog Number:**

AG5922

**GenBank Accession Number:**

BC002559

**GeneID (NCBI):**

51441

**UNIPROT ID:**

Q9Y5A9

**Full Name:**

YTH domain family, member 2

**Calculated MW:**

62 kDa

**Observed MW:**

63 kDa, 70 kDa

**Purification Method:**

Protein A purification

**CloneNo.:**

2F5H2

**Recommended Dilutions:**

WB 1:5000-1:50000

## Applications

**Tested Applications:**

WB, ELISA

**Species Specificity:**

Human, mouse, rat

**Positive Controls:**

WB : LNCaP cells, NIH/3T3 cells, HeLa cells, HEK-293 cells, Jurkat cells, 4T1 cells, HSC-T6 cells

## Background Information

YTHDF2, also named as YTH domain-containing family protein 2, is a 579 amino acid protein, which contains 1 YTH domain. YTHDF2 specifically recognizes and binds N6-methyladenosine (m6A)-containing RNAs, and regulates mRNA stability. 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. YTHDF2 acts as a regulator of mRNA stability: binding to m6A-containing mRNAs results in the localization to mRNA decay sites, such as processing bodies (P-bodies), leading to mRNA degradation. YTHDF2 also acts as a promoter of cap-independent mRNA translation following heat shock stress: upon stress, relocalizes to the nucleus and specifically binds mRNAs with some m6A methylation mark at their 5'-UTR, protecting demethylation of mRNAs by FTO, thereby promoting cap-independent mRNA translation. The calculated molecular weight of YTHDF2 is 62 kDa, but the phosphorylated YTHDF2 is about 65-70 kDa.

## Storage

**Storage:**

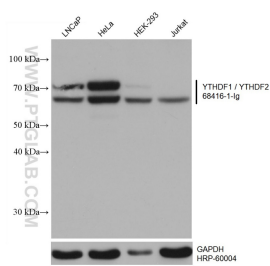
Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

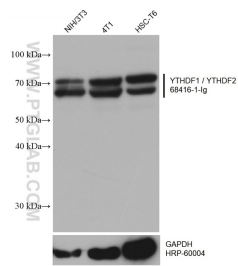
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 68416-1-Ig (YTHDF2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.



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