## For Research Use Only

## YTHDF2 Recombinant antibody

Catalog Number:81340-1-RR

Featured Product



**Purification Method:** 

CloneNo.:

3L6

Protein A purification

Recommended Dilutions:

IP 0.5-4.0 ug for 1.0-3.0 mg of total

WB 1:5000-1:50000

IF/ICC 1:200-1:800

protein lysate

**Basic Information** 

Catalog Number: GenBank Accession Number:

81340-1-RR BC002559 GeneID (NCBI): 100ul, Concentration: 1000 ug/ml by 51441

Nanodrop: **UNIPROT ID:** Q9Y5A9 Rabbit

Full Name: Isotype: YTH domain family, member 2

IgG Calculated MW:

Immunogen Catalog Number: 62 kDa AG5922

Observed MW: 65-70 kDa

**Applications** 

**Tested Applications:** 

WB, IF/ICC, IP, ELISA WB: HEK-293 cells, Jurkat cells, HeLa cells, Raji cells, Species Specificity:

NIH/3T3 cells, RAW 264.7 cells, C6 cells

Positive Controls:

human, mouse, rat IP: HeLa cells,

IF/ICC: sodium arsenite treated HeLa 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 (Pbodies), 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.

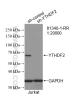
Storage Buffer:

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

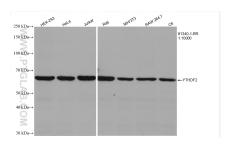
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

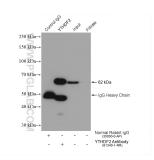
## **Selected Validation Data**



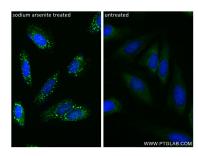
WB result of YTHDF2 antibody (81340-1-RR; 1:20000; incubated at room temperature for 1.5 hours) with sh-Control and sh-YTHDF2 transfected Jurkat cells.



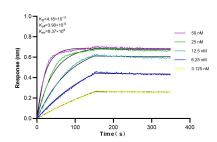
Various lysates were subjected to SDS PAGE followed by western blot with 81340-1-RR (YTHDF2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



IP result of anti-YTHDF2 (IP:81340-1-RR, 4ug: Detection:81340-1-RR 1:1000) with HeLa cells lysate 1880 ug.



Immunofluorescent analysis of (4% PFA) fixed sodium arsenite treated Hela cells using YTHDF2 antibody (81340-1-RR, Clone: 3L6) at dilution of 1:400 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Biolayer interferometry (BLL) kinetic assays of 81340-1-RR against Human YTHDF2 were performed. The affinity constant is 41.6 pM.