For Research Use Only

## YTHDF2 Recombinant monoclonal antibody, PBS Only



Catalog Number:81340-1-PBS Featured Product

**Basic Information** 

Catalog Number:

GenBank Accession Number: BC002559 Purification Method: Protein A purification

81340-1-PBS Source:

GeneID (NCBI):

CloneNo.:

Rabbit

51441 UNIPROT ID:

Q9Y5A9

Full Name:

3L6

Isotype: IgG

Immunogen Catalog Number: AG5922

YTH domain family, member 2

Calculated MW: 62 kDa Observed MW:

65-70 kDa

**Applications** 

**Tested Applications:** 

WB, IF/ICC, IP, Indirect ELISA

Species Specificity:

human, mouse, rat

## **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

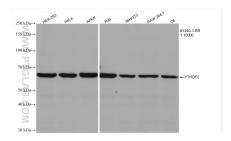
Storage:

Store at -80°C.

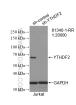
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer: PBS only, pH7.3

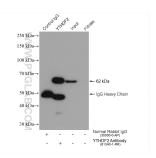
## **Selected Validation Data**



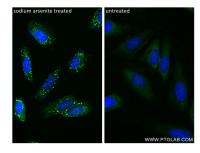
Various lysates were subjected to SDS PAGE followed by western blot with 81340-1-RR (YTHDF2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 81340-1-PBS in a different storage buffer formulation.



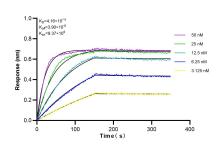
WB result of YTHDF2 antibody (81340-1-RR; 1:20000; incubated at room temperature for 1.5 hours) with sh-Control and sh-YTHDF2 transfected Jurkat cells. This data was developed using the same antibody clone with 81340-1-PBS in a different storage buffer formulation.



IP result of anti-YTHDF2 (IP:81340-1-RR, 4ug; Detection:81340-1-RR 1:1000) with Hela cells lysate 1880 ug. This data was developed using the same antibody clone with 81340-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 81340-1-PBS in a different storage buffer formulation.



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