For Research Use Only

YTHDF2 Recombinant antibody

Catalog Number:81340-1-RR

Featured Product



Basic Information

Catalog Number: GenBank Accession Number: 81340-1-RR BC002559

 Size:
 GeneID (NCBI):

 1000 ug/ml
 51441

 Source:
 UNIPROT ID:

 Rabbit
 Q9Y5A9

 Isotype:
 Full Name:

 IgG
 YTH domain family, member 2

 Immunogen Catalog Number:
 Calculated MW:

AG5922 62 kDa

Observed MW: 65-70 kDa Purification Method:

Protein A purification

CloneNo.: 3L6

Recommended Dilutions:

WB 1:5000-1:50000

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

protein lysate IF/ICC 1:200-1:800

Applications

Tested Applications: WB, IF/ICC, IP, ELISA Species Specificity:

human, mouse, rat

Positive Controls:

WB: HEK-293 cells, Jurkat cells, HeLa cells, Raji cells,

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

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 (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:

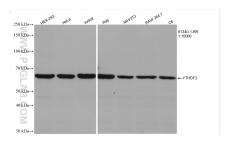
Store at -20 $^{\circ}\text{C}$. Stable for one year after shipment.

Storage Buffer:

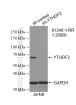
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

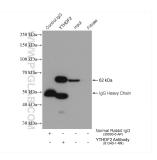
Selected Validation Data



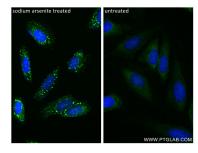
Various lysates were subjected to SDS PAGE followed by western blot with 81540-1-RR (YTHDF2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



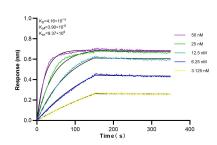
WB result of YTHDF2 antibody (81340-1-RR; 1:20000; incubated at room temperature for 1.5 hours) with sh-Control and sh-YTHDF2 transfected lurk at calls



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.