

For Research Use Only

4EBP1 Recombinant antibody

Catalog Number: 83890-5-RR

Featured Product



Basic Information

Catalog Number:

83890-5-RR

Concentration:

1000 ug/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG5056

GenBank Accession Number:

BC004459

GeneID (NCBI):

1978

UNIPROT ID:

Q13541

Full Name:

eukaryotic translation initiation factor 4E binding protein 1

Calculated MW:

118 aa, 12 kDa

Observed MW:

15-20 kDa

Purification Method:

Protein A purification

CloneNo.:

241055E7

Recommended Dilutions:

WB: 1:1000-1:8000

FC (Intra): 0.25 ug per 10⁶ cells in a 100 µl suspension

Applications

Tested Applications:

WB, FC (Intra), ELISA

Species Specificity:

human

Positive Controls:

WB : A549 cells, K-562 cells, HL-60 cells, HepG2 cells, HeLa cells, A431 cells

FC (Intra) : HEK-293 cells, HeLa cells

Background Information

4EBP1 (4E-BP1) is a translational regulator and functions by sequestering eukaryotic translation initiation factor 4E (eIF4E) from the translation initiation machinery. 4E-BP1 contains at least six phosphorylation sites (Thr37, Thr46, Ser65, Thr70, Ser83, and Ser112), four of which (Thr37, Thr46, Ser65, and Thr70) are known to be regulated by mTOR signaling. Phosphorylation of Thr37 and Thr46 is thought to prime 4E-BP1 for sequential phosphorylation of Ser65 and Thr70, which results in the dissociation of 4E-BP1 from eIF4E. (PMID: 12747827)

Storage

Storage:

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

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

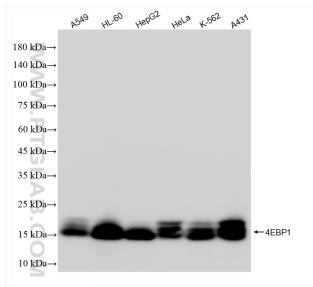
T: 4006900926

E: Proteintech-CN@ptglab.com

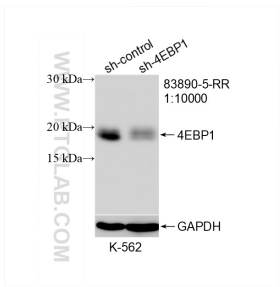
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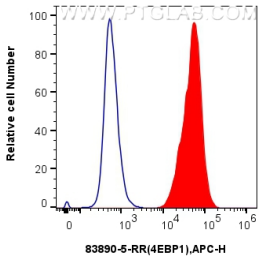
Selected Validation Data



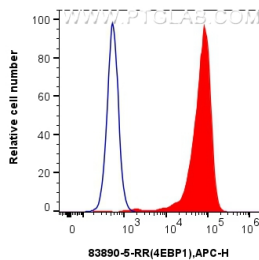
Various lysates were subjected to SDS PAGE followed by western blot with 83890-5-RR (4EBP1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



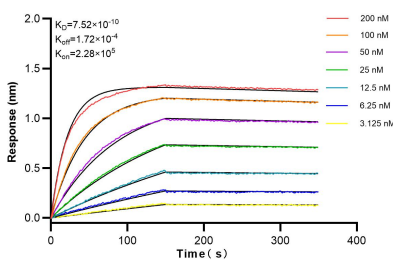
WB result of 4EBP1 antibody (83890-5-RR; 1:10000; incubated at room temperature for 1.5 hours) with sh-Control and sh-4EBP1 transfected K-562 cells.



1x10⁶ HeLa cells were intracellularly stained with 0.25 ug 4EBP1 Recombinant antibody (83890-5-RR, Clone:241055E7) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set.



1x10⁶ HEK-293 cells were intracellularly stained with 0.25 ug 4EBP1 Recombinant antibody (83890-5-RR, Clone:241055E7) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set.



Biolayer interferometry (BLI) kinetic assays of 83890-5-RR against Human 4EBP1 were performed. The affinity constant is 0.752 nM.