

For Research Use Only

# Phospho-4EBP1 (Thr37) Recombinant antibody, PBS Only (Capture)

Catalog Number: 81812-4-PBS



## Basic Information

<b>Catalog Number:</b> 81812-4-PBS	<b>GenBank Accession Number:</b> BC004459	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug , Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 1978	<b>CloneNo.:</b> 240535G3
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q13541	
<b>Isotype:</b> IgG	<b>Full Name:</b> eukaryotic translation initiation factor 4E binding protein 1	
	<b>Calculated MW:</b> 118 aa, 12 kDa	
	<b>Observed MW:</b> 15-20 kDa	

## Applications

**Tested Applications:**  
WB, Cytometric bead array, Indirect ELISA

**Species Specificity:**  
human

## Product Information

81812-4-PBS targets Phospho-4EBP1 (Thr37) as part of a matched antibody pair:

MP00559-2: 81812-4-PBS capture and 81812-3-PBS detection (validated in Cytometric bead array)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

## 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)

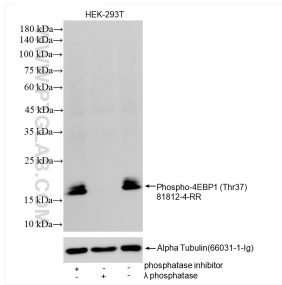
## Storage

**Storage:**  
Store at -80°C.  
**Storage Buffer:**  
PBS Only

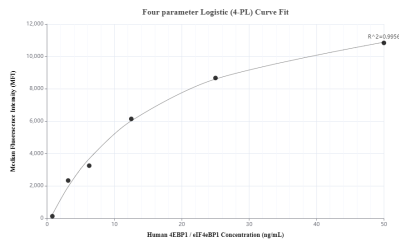
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
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Selected Validation Data



Non-treated HEK-293T cells, phosphatase inhibitor treated HEK-293T cells and  $\lambda$  phosphatase treated HEK-293T cells were subjected to SDS PAGE followed by western blot with 81812-4-RR (Phospho-4EBP1 (Thr37) antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with Alpha Tubulin (66031-1-Ig) antibody as a loading control. This data was developed using the same antibody clone with 81812-4-



Cytometric bead array standard curve of MP00559-2, Phospho-4EBP1 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 81812-4-PBS. Detection antibody: 81812-3-PBS. Standard: SY01767P. Range: 0.78-50 ng/mL