

For Research Use Only

# CEBP Alpha/CEBPA Recombinant antibody, PBS Only (Detector)

Catalog Number: 84668-2-PBS



## Basic Information

<b>Catalog Number:</b> 84668-2-PBS	<b>GenBank Accession Number:</b> NM_004364	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug, Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 1050	<b>CloneNo.:</b> 242101C10
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P49715	
<b>Isotype:</b> IgG	<b>Full Name:</b> CCAAT/enhancer binding protein (C/EBP), alpha	
<b>Immunogen Catalog Number:</b> AG29947	<b>Calculated MW:</b> 38 kDa	
	<b>Observed MW:</b> 40-45 kDa	

## Applications

**Tested Applications:**  
WB, FC (Intra), Cytometric bead array, Indirect ELISA

**Species Specificity:**  
human

## Product Information

84668-2-PBS targets CEBP Alpha/CEBPA as part of a matched antibody pair:

MP01479-1: 84668-1-PBS capture and 84668-2-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

CEBPA and its isoforms play important roles in lineage determination and gene activation in a variety of cell types by activating transcription from lineage-specific promoters. CEBPA is a DNA-binding protein that recognizes two different motifs: the CCAAT homology common to many promoters and the enhanced core homology common to many enhancers. In hematopoiesis, C/EBPa is a key factor in driving the development of myeloid cells interacting with a variety of factors, including c-Myc, PU.1, and microRNAs. It can also form heterodimers with the related proteins CEBP-beta and CEBP-gamma. The encoded protein has been shown to bind to the promoter and modulate the expression of the gene encoding leptin which plays an important role in body weight homeostasis. CEBPA can interact with CDK2 and CDK4, thereby inhibiting these kinases and causing growth arrest in cultured cells. Several pathways have been implicated as the means by which CEBPA mediates cell cycle arrest and proliferation, including p21, cyclin-dependent kinases and the E2F complex via c-Myc. The calculated molecular weight of CEBPA is 38 kDa, but modified CEBPA is about 42 kDa (PMID: 19623175).

## Storage

**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS Only

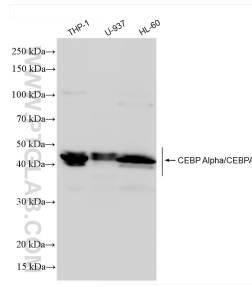
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

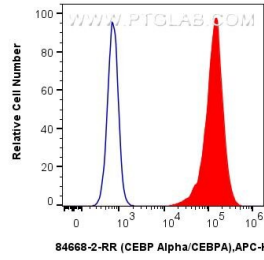
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

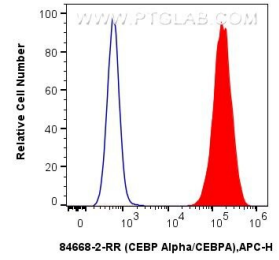
## Selected Validation Data



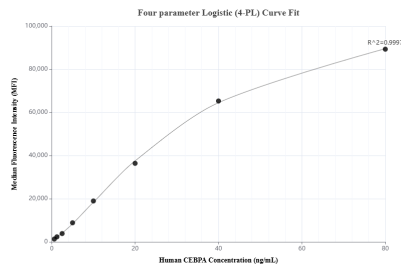
Various lysates were subjected to SDS PAGE followed by western blot with 84668-2-RR (CEBP Alpha/CEBPA antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84668-2-PBS in a different storage buffer formulation.



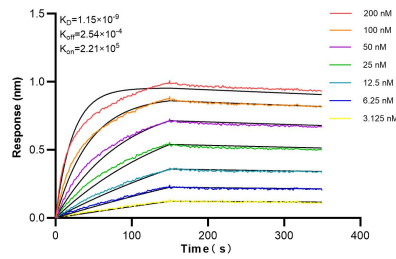
$1 \times 10^6$  HeLa cells were intracellularly stained with 0.25 ug CEBP Alpha/CEBPA Recombinant antibody (84668-2-RR, Clone:242101C10) and APC-Conjugated Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set. This data was developed using the same antibody clone with 84668-2-PBS in a



$1 \times 10^6$  HepG2 cells were intracellularly stained with 0.25 ug CEBP Alpha/CEBPA Recombinant antibody (84668-2-RR, Clone:242101C10) and APC-Conjugated Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set. This data was developed using the same antibody clone with 84668-2-PBS in a



Cytometric bead array standard curve of MP01479-1, CEBP Alpha/CEBPA Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84668-1-PBS. Detection antibody: 84668-2-PBS. Standard: Ag29947. Range: 0.625-80 ng/mL



Biolayer interferometry (BLI) kinetic assays of 84668-2-RR against Human CEBP Alpha/CEBPA were performed. The affinity constant is 1.15 nM.