For Research Use Only

CEBP Alpha/CEBPA Recombinant antibody

Catalog Number:84668-4-RR



Basic Information

Catalog Number: GenBank Accession Number: 84668-4-RR NM_004364

 $\begin{array}{lll} \text{Concentration:} & \text{GeneID (NCBI):} \\ 1000 \ \mu \, \text{g/ml} & 1050 \\ \\ \text{Source:} & \text{UNIPROT ID:} \\ \\ \text{Rabbit} & \text{P49715} \\ \end{array}$

Isotype: Full Name:

IgG CCAAT/enhancer binding protein Immunogen Catalog Number: (C/EBP), alpha

AG29947 Calculated MW: 38 kDa

Observed MW: 40-45 kDa

Applications

Tested Applications: IF/ICC, FC (Intra), ELISA

Species Specificity:

human

Purification Method: Protein A purfication

242101C9

CloneNo.:

Recommended Dilutions: IF/ICC 1:1000-1:4000

Positive Controls:

IF/ICC: HepG2 cells, HeLa cells

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.

Storage

Storage

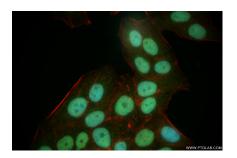
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

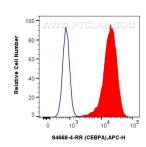
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



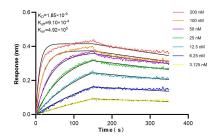
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using CEBP Alpha/CEBPA antibody (84668-4-RR, Clone: 242101C9) at dilution of 1:2000 and Coralite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red)



1x10^6 HeLa cells were intracellularly stained with 0.25 ug CEBP Alpha/CEBPA Recombinant antibody (84668-4-RR, Clone:242101C9) 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.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using CEBP Alpha/CEBPA antibody (84668-4-RR, Clone: 242101C9) at dilution of 1:2000 and Coralite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red)



Biolayer interferometry (BLL) kinetic assays of 84668-4-RR against Human CEBP Alpha/CEBPA were performed. The affinity constant is 1.85 nM.