

CEBPB Monoclonal antibody

Catalog Number: 66649-1-Ig **6 Publications**

Basic Information

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| Catalog Number: 66649-1-Ig | GenBank Accession Number: BC007538 | Purification Method: Protein G purification |
| Concentration: 1000 ug/ml | GeneID (NCBI): 1051 | CloneNo.: 2B6E10 |
| Source: Mouse | UNIPROT ID: P17676 | Recommended Dilutions: WB: 1:1000-1:6000 IHC: 1:150-1:600 |
| Isotype: IgG1 | Full Name: CCAAT/enhancer binding protein (C/EBP), beta | |
| Immunogen Catalog Number: AG20073 | Calculated MW: 345 aa, 36 kDa | |
| | Observed MW: 40-45 kDa | |

Applications

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| Tested Applications: WB, IHC, ELISA | Positive Controls: |
| Cited Applications: WB, IHC, IF | WB : HeLa cells, L02 cells, HepG2 cells |
| Species Specificity: human, mouse, rat | IHC : human lung cancer tissue, |
| Cited Species: human, mouse, rat, monkey | |

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Background Information

CCAAT/enhancer-binding protein beta (CEBPB), also known as LAP, is a important transcriptional activator in the regulation of genes involved in immune and inflammatory responses. It specifically binds to an IL-1 response element in the IL-6 gene. NF-IL6 also binds to regulatory regions of several acute-phase and cytokines genes. It probably plays a role in the regulation of acute-phase reaction, inflammation and hemopoiesis. The consensus recognition site is 5'-T[TTG]NNGNAA[TG]-3'. Functions in brown adipose tissue (BAT) differentiation By similarity. Regulates the transcriptional induction of peroxisome proliferator-activated receptor gamma (PPARG). CEBPb mRNAs possess alternative translation-initiation codons, which result in the formation of truncated forms of the protein. All major isoforms of CEBPB (38, 34, and 20 kDa) are expressed, with the 34 and 20kDa isoforms being more abundant in preovulatory follicles and further increased in corpora lutea (CL)(PMID:15647458).The truncated protein of 18 kDa (relative to the 30 kDa full-length protein that is known as LAP, or p30 CEBPb or liver-activating protein) lacks a transactivation domain,also known as LIP (p19 CEBPb or liver-inhibitory protein), can form homodimers or heterodimerize with other family members and, as it lacks the transactivation domain, can attenuate the transcriptional activation properties of the other isoforms.(10051447). Three variants of CEBPBs have been detected in many cell types: a 46 kDa full-length liver-enriched transcription-activating protein (LAP1), a 42 kDa LAP2 and a 20-kDa liver-enriched transcription-inhibitory protein (LIP). These variants are the result of an alternative translation initiation due to a leaky ribosomal scanning mechanism.(PMID:18820298).

Notable Publications

| Author | Pubmed ID | Journal | Application |
|--------------|-----------|--------------------|-------------|
| Weiyun Zhang | 35628429 | Int J Mol Sci | WB |
| Yu-Kun Yang | 33648583 | Stem Cell Res Ther | WB |
| Wanli Yu | 39933531 | Dev Cell | |

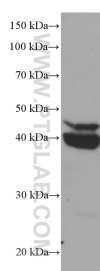
Storage

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

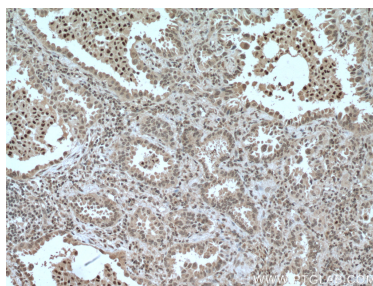
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



HeLa cells were subjected to SDS PAGE followed by western blot with 66649-1-Ig (CEBPB antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 66649-1-Ig (CEBPB antibody) at dilution of 1:300 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).