

CHOP mouse Monoclonal Antibody(2B1)

Catalog # AP63777

Specification

CHOP mouse Monoclonal Antibody(2B1) - Product Information

Application Primary Accession Reactivity Host Clonality WB, IHC-P, IF
P35638
Human, Rat, Mouse
Mouse
Monoclonal

CHOP mouse Monoclonal Antibody(2B1) - Additional Information

Gene ID 1649

Other Names DDIT3

Dilution

WB~~WB 1:1000-2000, IHC 1:100-200 IF 1:200

IHC-P~~N/A

IF~~WB 1:1000-2000, IHC 1:100-200 IF 1:200

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions

-20°C

CHOP mouse Monoclonal Antibody(2B1) - Protein Information

Name DDIT3

Synonyms CHOP, CHOP10, GADD153

Function

Multifunctional transcription factor in endoplasmic reticulum (ER) stress response (PubMed:15322075, PubMed:15775988, PubMed:19672300). Plays an essential role in the response to a wide variety of cell stresses and induces cell cycle arrest and apoptosis in response to ER stress (PubMed:15322075, PubMed:15775988). Plays a dual role both as an inhibitor of CCAAT/enhancer-binding protein (C/EBP) function and as an activator of other genes (By similarity). Acts as a dominant-negative regulator of C/EBP-induced transcription: dimerizes with members of the C/EBP family, impairs their association with C/EBP binding sites in the promoter regions, and inhibits the expression of C/EBP regulated genes (By similarity). Positively regulates



the transcription of TRIB3, IL6, IL8, IL23, TNFRSF10B/DR5, PPP1R15A/GADD34, BBC3/PUMA, BCL2L11/BIM and ERO1L (PubMed:15775988, PubMed:17709599, PubMed:20876114, PubMed:22761832). Negatively regulates; expression of BCL2 and MYOD1, ATF4-dependent transcriptional activation of asparagine synthetase (ASNS), CEBPA-dependent transcriptional activation of hepcidin (HAMP) and CEBPB-mediated expression of peroxisome proliferator-activated receptor gamma (PPARG) (PubMed:18940792, PubMed:19672300, PubMed:20829347). Together with ATF4, mediates ER- mediated cell death by promoting expression of genes involved in cellular amino acid metabolic processes, mRNA translation and the unfolded protein response (UPR) in response to ER stress (By similarity). Inhibits the canonical Wnt signaling pathway by binding to TCF7L2/TCF4, impairing its DNA-binding properties and repressing its transcriptional activity (PubMed:16434966). Plays a regulatory role in the inflammatory response through the induction of caspase-11 (CASP4/CASP11) which induces the activation of caspase-1 (CASP1) and both these caspases increase the activation of pro-IL1B to mature IL1B which is involved in the inflammatory response (By similarity). Acts as a major regulator of postnatal neovascularization through regulation of endothelial nitric oxide synthase (NOS3)-related signaling (By similarity).

Cellular Location

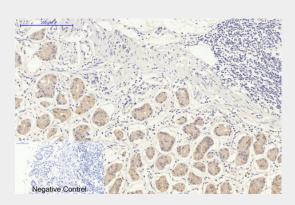
Cytoplasm. Nucleus Note=Present in the cytoplasm under non-stressed conditions and ER stress leads to its nuclear accumulation

CHOP mouse Monoclonal Antibody(2B1) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

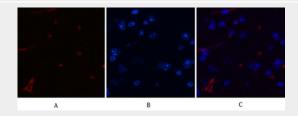
CHOP mouse Monoclonal Antibody (2B1) - Images



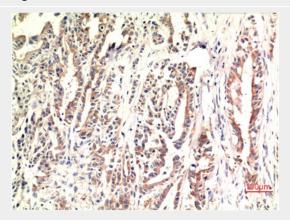
Immunohistochemical analysis of paraffin-embedded Human-stomach tissue. 1,CHOP Mouse



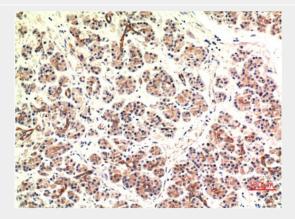
Monoclonal Antibody(2B1) was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



Immunofluorescence analysis of Mouse-brain tissue. 1,CHOP Mouse Monoclonal Antibody(2B1)(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B

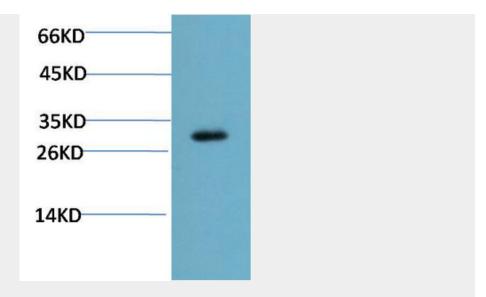


Immunohistochemical analysis of paraffin-embedded Human Stomach Carcinoma Tissue using CHOP Mouse mAb diluted at 1:200.



Immunohistochemical analysis of paraffin-embedded Human Pancreas Carcinoma Tissue using CHOP Mouse mAb diluted at 1:200.





Western blot analysis of Mouse Liver Tissue Lysate using CHOP Mouse mAb diluted at 1:2000.

CHOP mouse Monoclonal Antibody(2B1) - Background

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