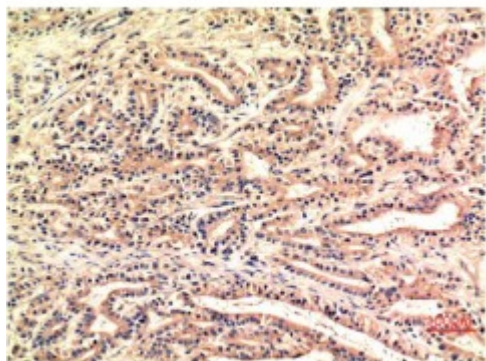


Anti-CHOP antibody



Description	Mouse monoclonal to CHOP.
Model	STJ97775
Host	Mouse
Reactivity	Human, Mouse, Rat
Applications	IHC
Immunogen	synthetic peptide derived from CHOP
Immunogen Region	10-90 aa
Gene ID	1649
Gene Symbol	DDIT3
Dilution range	IHC 1:100-200
Specificity	CHOP Mouse Monoclonal Antibody (1E1) detects endogenous levels of DDIT3
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
Clone ID	10
Note	For Research Use Only (RUO).
Protein Name	DNA damage-inducible transcript 3 protein DDIT-3 C/EBP zeta C/EBP-homologous protein CHOP C/EBP-homologous protein 10 CHOP-10 CCAAT/enhancer-binding protein homologous protein Growth arrest and DNA damage-in

Clonality	Monoclonal
Conjugation	Unconjugated
Isotype	IgG1
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:2726OMIM:126337
Alternative Names	DNA damage-inducible transcript 3 protein DDIT-3 C/EBP zeta C/EBP-homologous protein CHOP C/EBP-homologous protein 10 CHOP-10 CCAAT/enhancer-binding protein homologous protein Growth arrest and DNA damage-in
Function	Multifunctional transcription factor in ER stress response. 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. Plays a dual role both as an inhibitor of CCAAT/enhancer-binding protein (C/EBP) function and as an activator of other genes. 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. Positively regulates the transcription of TRIB3, IL6, IL8, IL23, TNFRSF10B/DR5, PPP1R15A/GADD34, BBC3/PUMA, BCL2L11/BIM and ERO1L. 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). Inhibits the canonical Wnt signaling pathway by binding to TCF7L2/TCF4, impairing its DNA-binding properties and repressing its transcriptional activity. 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.
Sequence and Domain Family	The N-terminal region is necessary for its proteasomal degradation, transcriptional activity and interaction with EP300/P300.
Cellular Localization	Cytoplasm. Nucleus. Present in the cytoplasm under non-stressed conditions and ER stress leads to its nuclear accumulation.
Post-translational Modifications	Ubiquitinated, leading to its degradation by the proteasome. Phosphorylation at serine residues by MAPK14 enhances its transcriptional activation activity while phosphorylation at serine residues by CK2 inhibits its transcriptional activation activity.