bs-1361R **[Primary Antibody]**

DDIT3 Rabbit pAb

www.bioss.com.cn
sales@bioss.com.cn
techsupport@bioss.com.cn
400-901-9800

DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 1649 **SWISS:** P35638

Target: DDIT3

Immunogen: KLH conjugated synthetic peptide derived from human GADD153: 75-168/168.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: This gene encodes a member of the CCAAT/enhancer-binding protein (C/EBP) family of transcription factors. The protein functions as a dominant-negative inhibitor by forming heterodimers with other C/EBP members, such as C/EBP and LAP (liver activator protein), and preventing their DNA binding activity. The protein is implicated in adipogenesis and erythropoiesis, is activated by endoplasmic reticulum stress, and promotes apoptosis. Fusion of this gene and FUS on chromosome 16 or EWSR1 on chromosome 22 induced by translocation generates chimeric proteins in myxoid liposarcomas or Ewing sarcoma. Multiple alternatively spliced transcript variants encoding two isoforms with different length have been identified. [provided by RefSeq, Aug 2010]. 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.

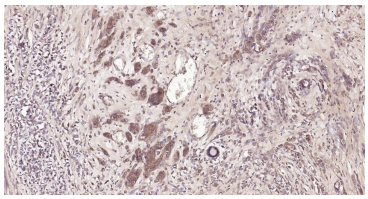
Applications: **IHC-P** (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)

Reactivity: Human, Mouse, Rat

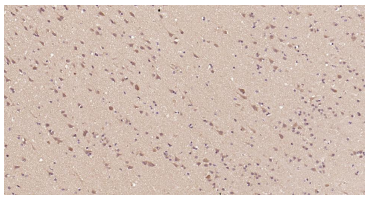
Predicted MW.: 19 kDa

Subcellular Location: Cytoplasm ,Nucleus

VALIDATION IMAGES



Paraformaldehyde-fixed, paraffin embedded Human Breast Cancer; Antigen retrieval by



Paraformaldehyde-fixed, paraffin embedded Human Cerebrum; Antigen retrieval by boiling in

boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with DDIT3 Polyclonal Antibody, Unconjugated (bs-1361R) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Rabbit, SP-0023) and DAB (C-0010) staining.

sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with DDIT3 Polyclonal Antibody, Unconjugated (bs-1361R) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Rabbit, SP-0023) and DAB (C-0010) staining.

SELECTED CITATIONS

- **[IF=13.281]** Tingting Wang. et al. Synergistic Lysosomal Impairment and ER Stress Activation for Boosted Autophagy Dysfunction Based on Te Double-Headed Nano-Bullets. SMALL. 2022 May 29 WB ;Mouse. 35644863
- **[IF=5.391]** Zhou L et al. KLF15-activating Twist2 ameliorated hepatic steatosis by inhibiting inflammation and improving mitochondrial dysfunction via NF-κB-FGF21 or SREBP1c-FGF21 pathway. FASEB J. 2019 Oct 24:fj201901347RR. WB ;Mouse&Human. 31648561
- **[IF=4.784]** Wang L et al. Radioprotective effect of Hohenbuehelia serotina polysaccharides through mediation of ER apoptosis pathway in vivo. Int J Biol Macromol. 2019 Apr 15;127:18-26. IHC ;Mouse. 30605745
- **[IF=4.868]** Cui J et al. Acetaldehyde Induces Neurotoxicity In Vitro via Oxidative Stress-and Ca2. Oxid Med Cell Longev. 2019 Jan 9;2019:2593742. ICC,WB ;Rat&Mouse. 30728884
- **[IF=3.858]** Li,et al.Silver nanoparticles induce SH-SY5Y cell apoptosis via endoplasmic reticulum- and mitochondrial pathways that lengthen endoplasmic reticulum-mitochondria contact sites and alter inositol-3-phosphate receptor function.(2018) Toxicology Letters. 285:156-167. WB ;Human. 29306025