

bs-20669R**[Primary Antibody]****Bioss**
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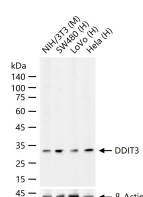
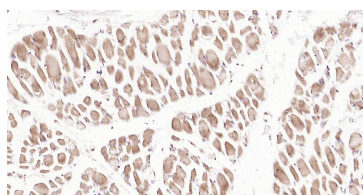
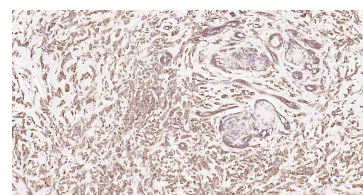
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400-901-9800

DDIT3 Rabbit pAb**— DATASHEET —****Host:** Rabbit**Isotype:** IgG**Clonality:** Polyclonal**GeneID:** 1649**SWISS:** P35638**Target:** DDIT3**Immunogen:** KLH conjugated synthetic peptide derived from human GADD153/DDIT3: 81-150/168.**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: WB (1:500-2000)**IHC-P** (1:50-200)**IHC-F** (1:50-200)**IF** (1:50-200)**Reactivity:** Human, Mouse, Rat
(predicted: Cow)**Predicted
MW.:** 19 kDa**Subcellular
Location:** Cytoplasm ,Nucleus**— VALIDATION IMAGES —**25 ug total protein per lane of various lysates
(see on figure) probed with DDIT3 polyclonalParaformaldehyde-fixed, paraffin embedded
Human Skeletal muscle; Antigen retrieval byParaformaldehyde-fixed, paraffin embedded
Human Breast Cancer; Antigen retrieval by

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

antibody, unconjugated (bs-20669R) at 1:500 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min.

boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with DDIT3 Polyclonal Antibody, Unconjugated (bs-20669R) at 1:200 overnight at 4°C, followed by conjugation to the SP Kit (Rabbit, SP-0023) and DAB (C-0010) staining.

boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with DDIT3 Polyclonal Antibody, Unconjugated (bs-20669R) 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=8.724]** Yong Tang. et al. Phosphorylation inhibition of protein-tyrosine phosphatase 1B tyrosine-152 induces bone regeneration coupled with angiogenesis for bone tissue engineering. *Bioact Mater.* 2021 Jul;6:2039 WB ;Mouse. 33511306
- **[IF=8]** Ting Hu. et al. Enhanced endoplasmic reticulum stress signaling disrupts porcine sertoli cell function in response to Bisphenol A exposure. *J ENVIRON MANAGE.* 2024 Nov;370:122908 WB ;Porcine. 39405871
- **[IF=7.675]** Reziyamu Wufuer. et al. Distinct Roles of Nrf1 and Nrf2 in Monitoring the Reductive Stress Response to Dithiothreitol (DTT). *ANTIOXIDANTS-BASEL.* 2022 Aug;11(8):1535 WB ;Human. 36009254
- **[IF=7.1]** Reziyamu Wufuer. et al. Distinct mechanisms by which Nrf1 and Nrf2 as drug targets contribute to the anticancer efficacy of cisplatin on hepatoma cells. *FREE RADICAL BIOLOGY AND MEDICINE.* 2024 Mar:213:488-511. Western blot ;Human. 38278308
- **[IF=6.304]** Biting Zhou. et al. Mitochondrial quality control protects photoreceptors against oxidative stress in the H2 O2-induced models of retinal degeneration diseases. *Cell Death Dis.* 2021 Apr;12(5):1-12 WB ;Mouse. 33879768