



## Rabbit Anti-phospho-DDIT3 (Ser30) antibody

SL5177R

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| <b>Product Name:</b>          | phospho-DDIT3 (Ser30)                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Chinese Name:</b>          | 磷酸化GADD153抗体                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Alias:</b>                 | DDIT3 (phospho S30); DDIT3 (phospho Ser30); DDIT3 (phospho-Ser30); p-DDIT3 (phospho S30); ; GADD153; CHOP; Growth arrest and DNA damage-inducible 153; C/EBP homologous protein; C/EBP Homology Protein; CEBPZ; CHOP10; DDIT 3; DNA Damage Inducible Transcript 3; GADD 153; Growth Arrest and DNA Damage Inducible Protein 153; Growth arrest and DNA damage inducible protein GADD153; MGC4154; DDIT3 HUMAN. |
| <b>Organism Species:</b>      | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Clonality:</b>             | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>React Species:</b>         | Human,Mouse,Rat,Dog,Pig,Cow,Rabbit,Sheep,                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Applications:</b>          | ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1μg/TestIF=1:100-500 (Paraffin sections need antigen repair)<br>not yet tested in other applications.<br>optimal dilutions/concentrations should be determined by the end user.                                                                                                                                                                         |
| <b>Molecular weight:</b>      | 19kDa                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Cellular localization:</b> | The nucleuscytoplasmic                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Form:</b>                  | Lyophilized or Liquid                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Concentration:</b>         | 1mg/ml                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>immunogen:</b>             | KLH conjugated Synthesised phosphopeptide derived from human GADD153 around the phosphorylation site of Ser30:VL(p-S)SD                                                                                                                                                                                                                                                                                        |
| <b>Lsotype:</b>               | IgG                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Purification:</b>          | affinity purified by Protein A                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Storage Buffer:</b>        | 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.                                                                                                                                                                                                                                                                                                                                               |
| <b>Storage:</b>               | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.                                                                                  |
| <b>PubMed:</b>                | <a href="#">PubMed</a>                                                                                                                                                                                                                                                                                                                                                                                         |

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.

**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.

**Subunit:**

Heterodimer. Interacts with TCF7L2/TCF4, EP300/P300, HDAC1, HDAC5 and HDAC6. Interacts with TRIB3 which blocks its association with EP300/P300. Interacts with FOXO3, CEBPB and ATF4.

**Subcellular Location:**

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

**Tissue Specificity:**

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

**Post-translational modifications:**

Note=A chromosomal aberration involving DDIT3 is found in a patient with malignant

**Product Detail:**

myxoid liposarcoma. Translocation t(12;16)(q13;p11) with FUS.

**Similarity:**

Belongs to the bZIP family.

Contains 1 bZIP (basic-leucine zipper) domain.

**SWISS:**

P35638

**Gene ID:**

1649

**Database links:**

[Entrez Gene: 1649](#)Human

[Entrez Gene: 13198](#)Mouse

[Entrez Gene: 29467](#)Rat

[Oimim: 126337](#)Human

[SwissProt: P35638](#)Human

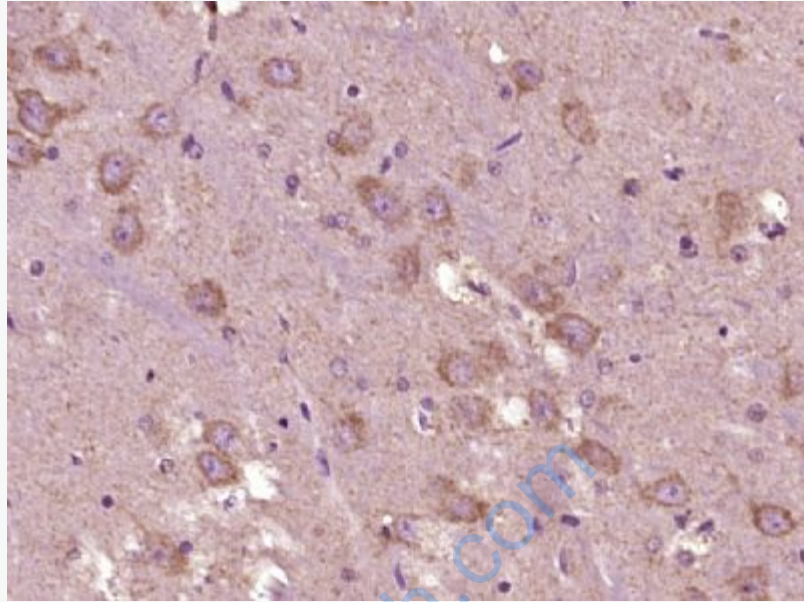
[SwissProt: P35639](#)Mouse

[SwissProt: Q62857](#)Rat

[Unigene: 505777](#)Human

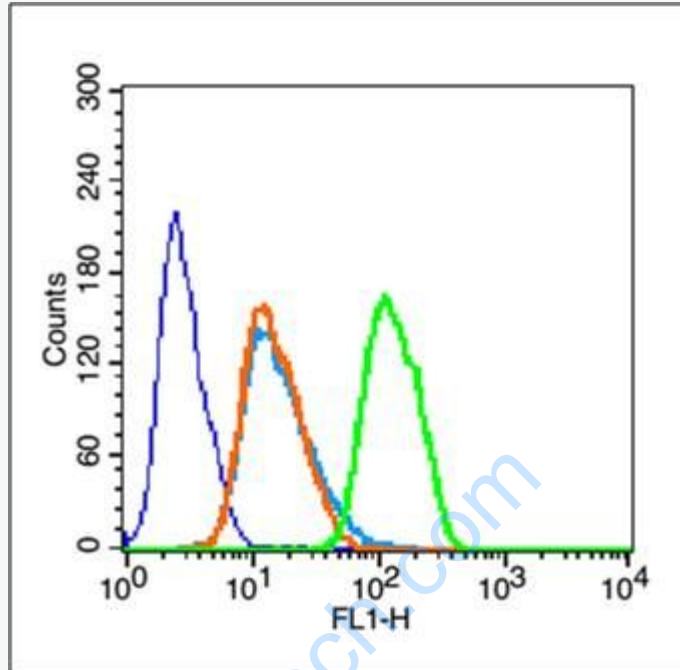
**Important Note:**

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



**Picture:**

Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-DDIT3 (Ser30)) Polyclonal Antibody, Unconjugated (SL5177R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Blank control (blue line): HeLa(fixed with 70% ethanol (Overnight at 4°C) and then permeabilized with 90% ice-cold methanol for 30 min on ice)

Primary Antibody (green line): Rabbit Anti-spho-DDIT3 (Ser30) antibody (SL5177R),Dilution: 1μg /10<sup>6</sup> cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody (white blue line): Goat anti-rabbit IgG-FITC,Dilution: 1μg /test.