

Datasheet for ABIN6260816
anti-DDIT3 antibody (N-Term)[Go to Product page](#)

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Overview

Quantity:	100 µL
Target:	DDIT3
Binding Specificity:	N-Term
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This DDIT3 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Immunofluorescence (IF), Immunocytochemistry (ICC)

Product Details

Immunogen:	A synthesized peptide derived from human DDIT3, corresponding to a region within N-terminal amino acids.
Isotype:	IgG
Specificity:	DDIT3 Antibody detects endogenous levels of total DDIT3.
Predicted Reactivity:	Pig,Bovine,Horse,Sheep,Rabbit,Dog
Purification:	The antiserum was purified by peptide affinity chromatography using SulfoLink™ Coupling Resin (Thermo Fisher Scientific).

Target Details

Target:	DDIT3
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Target Details

Alternative Name: DDIT3 ([DDIT3 Products](#))

Background: Description: 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.

Gene: DDIT3

Molecular Weight: 19kDa

Gene ID: 1649

UniProt: [P35638](#)

Pathways: [Regulation of Muscle Cell Differentiation](#), [ER-Nucleus Signaling](#), [Skeletal Muscle Fiber Development](#), [Cell RedoxHomeostasis](#)

Application Details

Application Notes: WB 1:500-1:2000, IHC 1:50-1:200, IF/ICC 1:100-1:500, ELISA(peptide) 1:20000-1:40000

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 1 mg/mL

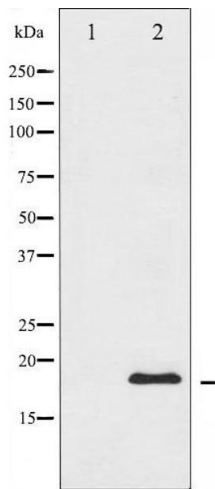
Buffer: Rabbit IgG in phosphate buffered saline , pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 %

Handling

	glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20 °C. Stable for 12 months from date of receipt.
Expiry Date:	12 months

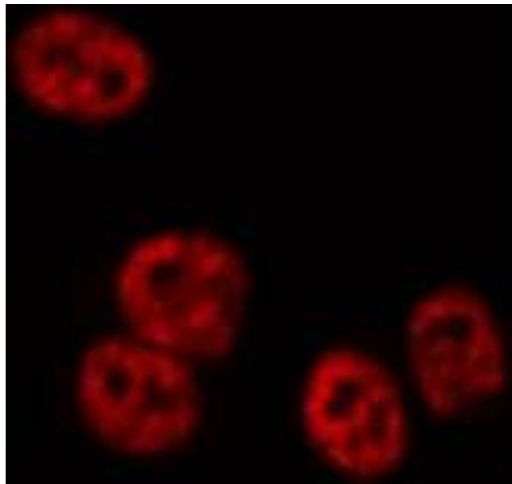
Publications

Product cited in:	<p>Yang, He, Li, Zhang, He, Duan, Huang, Xiang: "SWNHs (Single-Wall Carbon Nanohorns) Supervises Endoplasmic Reticulum (ER) Stress in Hepatocellular Carcinoma." in: Journal of nanoscience and nanotechnology, Vol. 18, Issue 10, pp. 6740-6745, (2018) (PubMed).</p> <p>Feng, Li, Chen: "Tanshinone IIA ameliorates apoptosis of cardiomyocytes induced by endoplasmic reticulum stress." in: Experimental biology and medicine (Maywood, N.J.), Vol. 241, Issue 18, pp. 2042-2048, (2017) (PubMed).</p> <p>Liu, Yu, Yang, Tian, Feng: "WITHDRAWN: Decreased level of endogenous ghrelin is involved in the progression of lung injury induced by oleic acid." in: Life sciences, (2017) (PubMed).</p> <p>Yang, Teng, Li, Xue, Guo, Xiao, Wu: "Hydrogen Sulfide Improves Vascular Calcification in Rats by Inhibiting Endoplasmic Reticulum Stress." in: Oxidative medicine and cellular longevity, Vol. 2016, pp. 9095242, (2016) (PubMed).</p>
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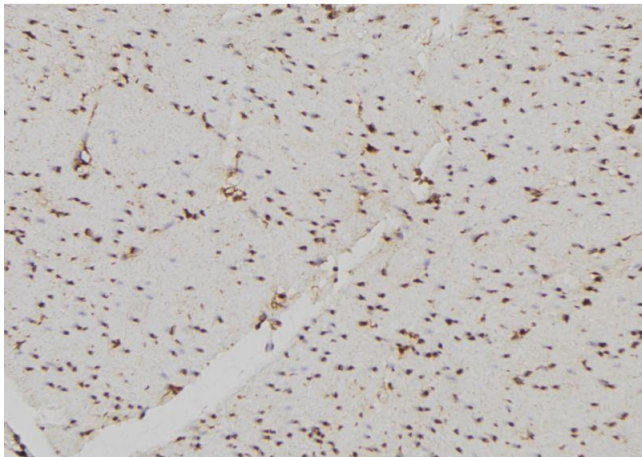
Western Blotting

Image 1. Western blot analysis of CHOP expression in HeLa whole cell lysates. The lane on the left is treated with the antigen-specific peptide.



Immunofluorescence (fixed cells)

Image 2. ABIN6269226 staining PC-3 cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25°C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37°C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody (Cat.# S0006), diluted at 1/600, was used as secondary antibody.



Immunohistochemistry

Image 3. ABIN6269226 at 1/100 staining Human gastric tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN6260816.