

# GADD 153 (B-3): sc-7351

## BACKGROUND

GADD 153 has been described as a growth arrest and DNA damage-inducible gene that encodes a C/EBP-related nuclear protein. This protein has also been designated C/EBP-homologous protein (CHOP-10). GADD 153 expression is induced by a variety of cellular stresses, including nutrient deprivation and metabolic perturbations. GADD 153 functions to block cells in G<sub>1</sub> to S phase in cell cycle progression and acts by dimerizing with other C/EBP proteins to direct GADD 153 dimers away from "classical" C/EBP binding sites, recognizing instead unique "nonclassical" sites. Thus GADD 153 acts as a negative modulator of C/EBP-like proteins in certain terminally differentiated cells, similar to the regulatory function of Id on the activity of Myo D and Myo D-related proteins involved in the development of muscle cells.

## CHROMOSOMAL LOCATION

Genetic locus: DDIT3 (human) mapping to 12q13.3; Ddit3 (mouse) mapping to 10 D3.

## SOURCE

GADD 153 (B-3) is a mouse monoclonal antibody raised against amino acids 1-168 representing full length GADD 153 of mouse origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

GADD 153 (B-3) is available conjugated to agarose (sc-7351 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-7351 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-7351 PE), fluorescein (sc-7351 FITC), Alexa Fluor<sup>®</sup> 488 (sc-7351 AF488), Alexa Fluor<sup>®</sup> 546 (sc-7351 AF546), Alexa Fluor<sup>®</sup> 594 (sc-7351 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-7351 AF647), 200 µg/ml, for WVB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-7351 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-7351 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor<sup>®</sup> is a trademark of Molecular Probes, Inc., Oregon, USA

## APPLICATIONS

GADD 153 (B-3) is recommended for detection of GADD 153 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for GADD 153 siRNA (h): sc-35437, GADD 153 siRNA (m): sc-35438, GADD 153 siRNA (r): sc-156118, GADD 153 shRNA Plasmid (h): sc-35437-SH, GADD 153 shRNA Plasmid (m): sc-35438-SH, GADD 153 shRNA Plasmid (r): sc-156118-SH, GADD 153 shRNA (h) Lentiviral Particles: sc-35437-V, GADD 153 shRNA (m) Lentiviral Particles: sc-35438-V and GADD 153 shRNA (r) Lentiviral Particles: sc-156118-V.

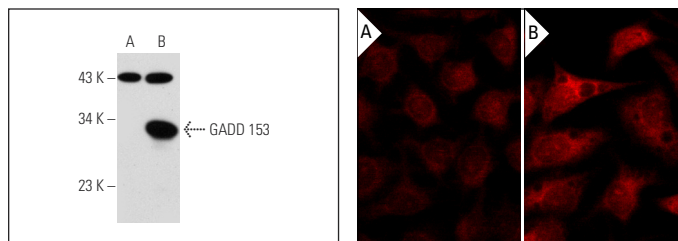
Molecular Weight of GADD 153: 30 kDa.

Positive Controls: GADD 153 (m): 293T Lysate: sc-120383, RAW 264.7 whole cell lysate: sc-2211 or RAW 264.7 + LPS/PMA cell lysate: sc-2212.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## DATA



GADD 153 (B-3): sc-7351. Western blot analysis of GADD 153 expression in non-transfected: sc-117752 (A) and mouse GADD 153 transfected: sc-120383 (B) 293T whole cell lysates.

Tubeimoside I: sc-204931. Immunofluorescence staining of methanol-fixed untreated (A) and HeLa cells treated with Tubeimoside I, showing increased expression of GADD 153 (B). Antibody tested: GADD 153 (B-3): sc-7351.

## SELECT PRODUCT CITATIONS

- Baechtold, H., et al. 1999. Human 75-kDa DNA-pairing protein is identical to the pro-oncoprotein TLS/FUS and is able to promote D-loop formation. *J. Biol. Chem.* 274: 34337-34342.
- Kang, E.S., et al. 2017. xCT deficiency aggravates acetaminophen-induced hepatotoxicity under inhibition of the transsulfuration pathway. *Free Radic. Res.* 51: 80-90.
- Kuo, A., et al. 2017. Lipid droplet biogenesis and function in the endothelium. *Circ. Res.* 120: 1289-1297.
- Lim, W., et al. 2017. A critical role for adiponectin-mediated development of endometrial luminal epithelial cells during the peri-implantation period of pregnancy. *J. Cell. Physiol.* 232: 3146-3157.
- Akoui, A., et al. 2017. Palmitate mediated diacylglycerol accumulation causes endoplasmic reticulum stress, Plin2 degradation, and cell death in H9C2 cardiomyoblasts. *Exp. Cell Res.* 354: 85-94.
- Trautmann, M., et al. 2017. FUS-DDIT3 fusion protein-driven IGF-1R signaling is a therapeutic target in myxoid liposarcoma. *Clin. Cancer Res.* 23: 6227-6238.
- Alm, P.S., et al. 2017. Grandpaternal-induced transgenerational dietary reprogramming of the unfolded protein response in skeletal muscle. *Mol. Metab.* 6: 621-630.
- Márton, M., et al. 2017. A systems biological view of life-and-death decision with respect to endoplasmic reticulum stress-the role of PERK pathway. *Int. J. Mol. Sci.* 18 pii: E58.
- Olgar, Y., et al. 2018. Induction of endoplasmic reticulum stress and changes in expression levels of Zn<sup>2+</sup>-transporters in hypertrophic rat heart. *Mol. Cell. Biochem.* 440: 209-219.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.