

GADD 153 (h): 293T Lysate: sc-177265

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, inducing nutrient deprivation and metabolic perturbations. GADD 153 functions to block cells in G₁ 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.

REFERENCES

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4. Smith, M.L., et al. 1994. Interaction of the p53-regulated protein GADD 45 with proliferating cell nuclear antigen. *Science* 266: 1376-1380.
5. Gujuluva, C.N., et al. 1994. Effect of UV-irradiation on cell cycle, viability and the expression of p53, GADD 153 and GADD 45 genes in normal and HPV-immortalized human oral keratinocytes. *Oncogene* 9: 1819-1827.
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8. Su, Z.Z., et al. 1997. Subtraction hybridization identifies a transformation progression associated-gene PEG-3 with sequence homology to a growth arrest and DNA damage-inducible gene. *Proc. Natl. Acad. Sci. USA* 94: 9125-9130.
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CHROMOSOMAL LOCATION

Genetic locus: DDIT3 (human) mapping to 12q13.3.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

PRODUCT

GADD 153 (h): 293T Lysate represents a lysate of human GADD 153 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

GADD 153 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive GADD 153 antibodies. Recommended use: 10-20 μ l per lane.

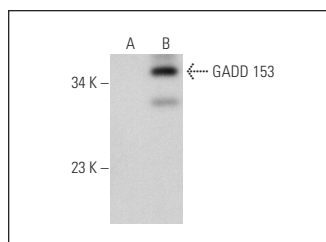
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

GADD 153 (B-3): sc-7351 is recommended as a positive control antibody for Western Blot analysis of enhanced human GADD 153 expression in GADD 153 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

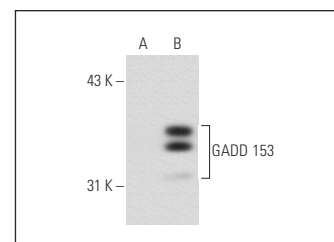
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



GADD 153 (B-3): sc-7351. Western blot analysis of GADD 153 expression in non-transfected: sc-117752 (A) and human GADD 153 transfected: sc-177265 (B) 293T whole cell lysates.



GADD 153 (6D313): sc-71136. Western blot analysis of GADD 153 expression in non-transfected: sc-117752 (A) and human GADD 153 transfected: sc-177265 (B) 293T whole cell lysates.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.