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


CHROMOSOMAL LOCATION

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

STORAGE

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

PROTOCOLS

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

SOURCE

GADD 153 (6D313) is a mouse monoclonal antibody raised against GADD 153 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG2b in 1.0 mL PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

GADD 153 (6D313) is recommended for detection of GADD 153 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation (1–2 µg per 100–500 µg of total protein (1 ml of cell lysate)).


Molecular Weight of GADD 153: 30 kDa.

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

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:200-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA

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.

RESEARCH USE

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