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 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


REFERENCES CHROMOSOMAL LOCATION

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

SOURCE

GADD 153 (H-5) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 140-168 at the C-terminus of GADD 153 of human origin.

PRODUCT

Each vial contains 200 µg IgG2b kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

GADD 153 (H-5) is available conjugated to agarose (sc-166682 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-166682 HRP), 200 µg/ml, for WB, (HCP) and ELISA; to either phycocyanin (sc-166682 PE), fluorescein (sc-166682 FITC), Alexa Fluor® 488 (sc-166682 AF488), Alexa Fluor® 546 (sc-166682 AF546), Alexa Fluor® 594 (sc-166682 AF594) or Alexa Fluor® 647 (sc-166682 AF647), 200 µg/ml, for WB (RGB), IF, IHC and FCM; and to either Alexa Fluor® 680 (sc-166682 AF680) or Alexa Fluor® 790 (sc-166682 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM. Blocking peptide available for competition studies, sc-166682 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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RESEARCH USE

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

APPLICATIONS

GADD 153 (H-5) is recommended for detection of GADD 153 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

GADD 153 (H-5) is also recommended for detection of GADD 153 in additional species, including equine, canine, bovine and porcine.


Molecular Weight of GADD 153: 30 kDa.

Positive Controls: RAW 264.7 + LPS/PMA cell lysate: sc-2212 or RAW 264.7 whole cell lysate: sc-2211.

DATA

SELECT PRODUCT CITATIONS


STORAGE

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