APPLICATIONS

GADD 34 (C-19) is recommended for detection of GADD 34 of mouse and rat 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)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for GADD 34 siRNA (m): sc-37415.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

BACKGROUND

It is well established that cell cycle progression is subject to arrest at G1 and G2 checkpoints in response to DNA damage, presumably to allow time for DNA repair prior to entry into S and M phase, respectively. The p53 tumor suppressor is required for one such G1 checkpoint and functions to upregulate expression of GADD 45 and the mitotic inhibitory protein p21. GADD 45 has been shown to stimulate DNA excision repair in vitro and to inhibit entry of cells into S phase, and it apparently acts in concert with GADD 153 in inducing growth arrest. A related DNA-damage inducible gene, GADD 34 (also designated MyD116) has been shown to synergize with GADD 45 or GADD 153 in suppressing cell growth. PEG-3 (progression elevated gene-3) shares significant homology with GADD 34 and is inducible by DNA damage. PEG-3 expression has been shown to be elevated in cells displaying a progressed-transformed phenotype.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: PPP1R15A (human) mapping to 19q13.2.

SOURCE

GADD 34 (C-19) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of GADD 34 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-825 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).