

NOC2L (L-14): sc-165120

BACKGROUND

GADD 153, a growth arrest and DNA damage-inducible gene, encodes a C/EBP-related nuclear protein. This protein has also been designated C/EBP-homologous protein (CHOP-10 or C/EBP ζ). 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 during 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. GADD 153 belongs to the CBF/MAK21 family, which also includes NOC2L, NOC3L and NOC4L. NOC2L is a 749 amino acid nuclear protein that may play a role in cell cycle regulation.

REFERENCES

- Sherr, C.J. 1994. G₁ phase progression: cycling on cue. *Cell* 79: 551-555.
- Ron, D. 1994. Inducible growth arrest: new mechanistic insights. *Proc. Natl. Acad. Sci. USA* 91: 1985-1986.
- Smith, M.L., et al. 1994. Interaction of the p53-regulated protein GADD 45 with proliferating cell nuclear antigen. *Science* 266: 1376-1380.
- 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.
- Zhan, Q., et al. 1994. The GADD and MyD genes define a novel set of mammalian genes encoding acidic proteins that synergistically suppress cell growth. *Mol. Cell. Biol.* 14: 2361-2371.
- 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.
- Ito, A., et al. 2000. Bystander-killing effect and cyclic induction of TNF α gene under heat-inducible promoter GADD 153. *J. Biosci. Bioeng.* 90: 437-441.
- Johmura, Y., et al. 2008. FAD24, a regulator of adipogenesis and DNA replication, inhibits H-Ras-mediated transformation by repressing NF κ B activity. *Biochem. Biophys. Res. Commun.* 369: 464-470.
- Johmura, Y., et al. 2008. FAD24, a regulator of adipogenesis, is required for the regulation of DNA replication in cell proliferation. *Biol. Pharm. Bull.* 31: 1092-1095.

CHROMOSOMAL LOCATION

Genetic locus: NOC2L (human) mapping to 1p36.33; Noc2l (mouse) mapping to 4.

SOURCE

NOC2L (L-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NOC2L of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-165120 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

NOC2L (L-14) is recommended for detection of NOC2L of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

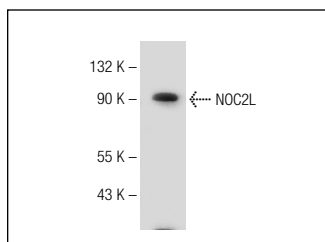
NOC2L (L-14) is also recommended for detection of NOC2L in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for NOC2L siRNA (h): sc-88134, NOC2L siRNA (m): sc-156064, NOC2L shRNA Plasmid (h): sc-88134-SH, NOC2L shRNA Plasmid (m): sc-156064-SH, NOC2L shRNA (h) Lentiviral Particles: sc-88134-V and NOC2L shRNA (m) Lentiviral Particles: sc-156064-V.

Molecular Weight of NOC2L: 85 kDa.

Positive Controls: A-375 cell lysate: sc-3811.

DATA



NOC2L (L-14): sc-165120. Western blot analysis of NOC2L expression in A-375 whole cell lysate.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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