

DSCP1 (G-18): sc-246480

BACKGROUND

DSCP1 (damage-stimulated cytoplasmic protein 1), also known as TP53113 (tumor protein p53-inducible protein 13), is a 393 amino acid single-pass type I membrane protein that is ubiquitously expressed in normal adult tissues. Genotoxic stresses of adriamycin and/or ultraviolet beam irradiation lead to upregulation of DSCP1 in a p53-dependent manner. Overexpression of DSCP1 inhibits tumor cell growth, suggesting that it may act as a tumor suppressor. The gene encoding DSCP1 maps to human chromosome 17, which comprises over 2.5% of the human genome and encodes over 1,200 genes. Two key tumor suppressor genes are associated with chromosome 17, namely, p53 and BRCA1. Tumor suppressor p53 is necessary for maintenance of cellular genetic integrity by moderating cell fate through DNA repair versus cell death. Malfunction or loss of p53 expression is associated with malignant cell growth and Li-Fraumeni syndrome.

REFERENCES

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2. Gilbert, F. 1998. Disease genes and chromosomes: disease maps of the human genome. *Chromosome 17. Genet. Test.* 2: 357-381.
3. Komarova, E.A. and Gudkov, A.V. 1998. Could p53 be a target for therapeutic suppression? *Semin. Cancer Biol.* 8: 389-400.
4. Hata, T., Ogawa, T., Yokoyama, T.A., Fukushige, S., Horii, A. and Furukawa, T. 2004. DSCP1, a novel TP53-inducible gene, is upregulated by strong genotoxic stresses and its overexpression inhibits tumor cell growth *in vitro*. *Int. J. Oncol.* 24: 513-520.
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CHROMOSOMAL LOCATION

Genetic locus: TP53113 (human) mapping to 17q11.2.

SOURCE

DSCP1 (G-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of DSCP1 of human 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-246480 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

DSCP1 (G-18) is recommended for detection of DSCP1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Suitable for use as control antibody for DSCP1 siRNA (h): sc-93555, DSCP1 shRNA Plasmid (h): sc-93555-SH and DSCP1 shRNA (h) Lentiviral Particles: sc-93555-V.

Molecular Weight of DSCP1: 42 kDa.

Positive Controls: Human fetal liver tissue extract.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

PROTOCOLS

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