SANTA CRUZ BIOTECHNOLOGY, INC.

DBC-1 (T-19): sc-54067



BACKGROUND

DBC-1 (deleted in breast cancer gene 1 protein), also known as p30 DBC protein, is one of the genes located within the region of chromosome 8 (8p21.3) that is homozygously deleted in some breast cancers. DBC-1 contains a nuclear localization signal, an N-terminal leucine zipper, an EF hand and a C-terminal coiled-coil region. DBC-1 is closely related to DIS but lacks the SAP domain. During death signaling mediated by TNF α , endogenous DBC-1 undergoes caspase-dependent processing to generate DBC-1 p120 and p66, both of which include the C-terminus of the protein. Both DBC-1 p120 and p66 relocate to the cytoplasm. Overexpression of the DBC-1 p120 form results in mitochondrial clustering and matrix condensation and increases the sensitivity of cells to TNF α -mediated apoptosis. In addition, DBC-1 directly interacts with unliganded ER α , stabilizing its expression and therefore collaborating to suppress apoptosis and promote hormone-independent cell growth.

CHROMOSOMAL LOCATION

Genetic locus: KIAA1967 (human) mapping to 8p21.3; Ccar2 (mouse) mapping to 14 D2.

SOURCE

DBC-1 (T-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DBC-1 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-54067 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DBC-1 (T-19) is recommended for detection of DBC-1 of human origin, 2610301G19Rik of mouse origin and the corresponding rat homolog 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).

DBC-1 (T-19) is also recommended for detection of DBC-1 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for DBC-1 siRNA (h): sc-72274, 2610301G19Rik siRNA (m): sc-108805, DBC-1 shRNA Plasmid (h): sc-72274-SH, 2610301G19Rik shRNA Plasmid (m): sc-108805-SH, DBC-1 shRNA (h) Lentiviral Particles: sc-72274-V and 2610301G19Rik shRNA (m) Lentiviral Particles: sc-108805-V.

Molecular Weight of DBC-1: 150 kDa.

Positive Controls: A549 cell lysate: sc-2413, HeLa whole cell lysate: sc-2200 or T-47D cell lysate: sc-2293.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA





DBC-1 (T-19): sc-54067. Western blot analysis of DBC-1 expression in A549 (**A**), T-47D (**B**) and HeLa (**C**) whole cell lysates and A549 nuclear extract (**D**).

DBC-1 (T-19): sc-54067. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization.

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.

MONOS Satisfation Guaranteed

Try **DBC-1 (H-2): sc-166733**, our highly recommended monoclonal alternative to DBC-1 (T-19).