

DBC-1 (H-120): sc-67373

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 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 (H-120) is a rabbit polyclonal antibody raised against amino acids 148-267 mapping near the N-terminus of DBC-1 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.

RESEARCH USE

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

APPLICATIONS

DBC-1 (H-120) 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), 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).

DBC-1 (H-120) is also recommended for detection of DBC-1 in additional species, including equine, canine, bovine 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.

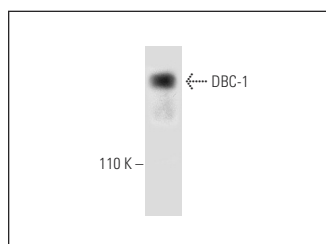
Molecular Weight of DBC-1: 150 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, A549 cell lysate: sc-2413 or Jurkat nuclear extract: sc-2132.

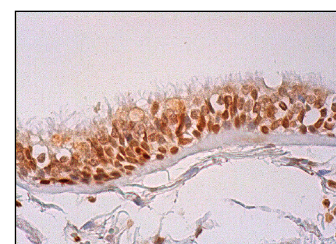
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



DBC-1 (H-120): sc-67373. Western blot analysis of DBC-1 expression in Jurkat nuclear extract.



DBC-1 (H-120): sc-67373. Immunoperoxidase staining of formalin fixed, paraffin-embedded human bronchus tissue showing nuclear staining of respiratory epithelial cells.

SELECT PRODUCT CITATIONS

- Pan, C.C., et al. 2014. Src-mediated post-translational regulation of endoglin stability and function is critical for angiogenesis. J. Biol. Chem. E-published.

STORAGE

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

PROTOCOLS

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



Try **DBC-1 (H-2): sc-166733**, our highly recommended monoclonal alternative to DBC-1 (H-120).