

Db1 (3): sc-89



The Power to Question

BACKGROUND

The superfamily of GTP binding proteins, for which the Ras proteins are prototypes, has been implicated in regulation of a broad range of biological activities. One member of the family, Cdc42Hs (originally referred to as Gp or G25K), appears to represent the human homolog of the *Saccharomyces cerevisiae* cell division protein, Cdc42Sc. The predicted amino acid sequence of Cdc42Hs is very similar to those of various members of the Ras superfamily proteins including N-, K- and H-Ras proteins (30-35% identical), Rho proteins (50% identical) and the Rac proteins (70% identical). A second *S. cerevisiae* protein, Cdc24, which is known from complementation studies to act with Cdc42Sc to regulate the development of normal cell shape in yeast, contains a region of sequence homology with the Db1 oncogene product. Db1 specifically catalyzes the dissociation of GDP from Cdc42Hs, thus representing a highly selective guanine nucleotide exchange factor for Cdc42Hs.

CHROMOSOMAL LOCATION

Genetic locus: MCF2 (human) mapping to Xq27.1; Mcf2 (mouse) mapping to X A6.

SOURCE

Db1 (3) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within the C-terminus of Db1 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-89 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Db1 (3) is recommended for detection of Db1 of mouse, rat and human 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)], 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).

Suitable for use as control antibody for Db1 siRNA (h): sc-35181, Db1 siRNA (m): sc-35182, Db1 shRNA Plasmid (h): sc-35181-SH, Db1 shRNA Plasmid (m): sc-35182-SH, Db1 shRNA (h) Lentiviral Particles: sc-35181-V and Db1 shRNA (m) Lentiviral Particles: sc-35182-V.

Molecular Weight of Db1: 102 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201 or NIH/3T3 whole cell lysate: sc-2210.

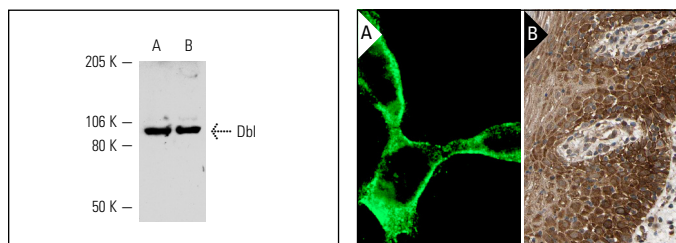
STORAGE

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.

DATA



Db1 (3): sc-89. Western blot analysis of Db1 expression in A-431 whole cell lysate.

Db1 (3): sc-89. Immunofluorescence staining of methanol-fixed A-431 cells showing cytoplasmic staining (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human oral mucosa tissue showing cytoplasmic staining of surface epithelial cells. Kindly provided by The Swedish Human Protein Atlas (HPA) program (B).

SELECT PRODUCT CITATIONS

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