SANTA CRUZ BIOTECHNOLOGY, INC.

DOCK 180 (E-2): sc-514080

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The v-Crk oncogene product shares homologous amino acid sequences, designated Src homology region 2 (SH2) and SH3, with many molecules involved in signal transduction. The v-Crk cellular homolog, c-Crk, is a member of a newly emerging class of genes including Nck and GRB2/ASH which encode proteins that consist primarily of SH2 and SH3 domains. Two distinct human c-Crk cDNAs, designated Crk I and Crk II, have been identified and shown to represent alternative splice products of c-Crk. The major translational product of c-Crk I has been identified as a variably expressed protein, while c-Crk II encodes a widely expressed protein and a more variably expressed protein. The major c-Crk transforming activity appears associated with c-Crk I p28 expression. DOCK 180, a protein downstream of Crk, has been identified as a major Crk-associated protein. When DOCK 180 is recruited to the plasma membrane from a cytoplasmic reservoir, presumably by Crk, changes in cellular morphology and spindle formation occur, suggesting DOCK 180 to be a Crk effector molecule.

CHROMOSOMAL LOCATION

Genetic locus: DOCK1 (human) mapping to 10q26.2; Dock1 (mouse) mapping to 7 F3.

SOURCE

DOCK 180 (E-2) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 3-24 at the N-terminus of DOCK 180 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

DOCK 180 (E-2) is available conjugated to agarose (sc-514080 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-514080 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514080 PE), fluorescein (sc-514080 FITC), Alexa Fluor® 488 (sc-514080 AF488), Alexa Fluor® 546 (sc-514080 AF546), Alexa Fluor® 594 (sc-514080 AF594) or Alexa Fluor® 647 (sc-514080 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514080 AF680) or Alexa Fluor® 790 (sc-514080 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-514080 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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 for detailed protocols and support products.

APPLICATIONS

DOCK 180 (E-2) is recommended for detection of DOCK 180 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for DOCK 180 siRNA (h): sc-35207, DOCK 180 siRNA (m): sc-35208, DOCK 180 shRNA Plasmid (h): sc-35207-SH, DOCK 180 shRNA Plasmid (m): sc-35208-SH, DOCK 180 shRNA (h) Lentiviral Particles: sc-35207-V and DOCK 180 shRNA (m) Lentiviral Particles: sc-35208-V.

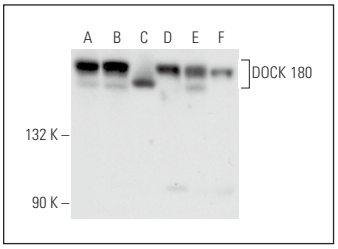
Molecular Weight of DOCK 180: 180 kDa.

Positive Controls: PC-12 cell lysate: sc-2250, H4 cell lysate: sc-2408 or HeLa whole cell lysate: sc-2200.

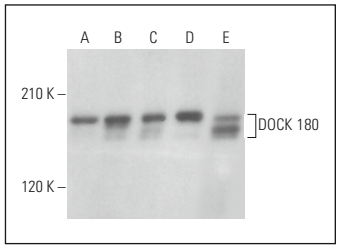
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



DOCK 180 (E-2): sc-514080. Western blot analysis of DOCK 180 expression in PC-12 (**A**), H4 (**B**), A-431 (**C**), HeLa (**D**), JAR (**E**) and MCF7 (**F**) whole cell lysates.



DOCK 180 (E-2): sc-514080. Western blot analysis of DOCK 180 expression in HeLa (**A**), ACHN (**B**), NIH/3T3 (**C**) and 3T3-L1 (**D**) whole cell lysates and rat cerebellum tissue extract (**E**).

SELECT PRODUCT CITATIONS

1. Misek, S.A., et al. 2017. EGFR signals through a DOCK180-MLK3 axis to drive glioblastoma cell invasion. Mol. Cancer Res. 15: 1085-1095.

RESEARCH USE

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