

DOCK 180 (N-19): sc-6043

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 (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of DOCK 180 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-6043 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DOCK 180 (N-19) is recommended for detection of DOCK 180 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) 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: 3T3-L1 cell lysate: sc-2243, PC-12 cell lysate: sc-2250 or HeLa whole cell lysate: sc-2200.

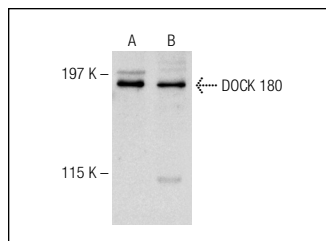
STORAGE

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



DOCK 180 (N-19): sc-6043. Western blot analysis of DOCK 180 expression in 3T3-L1 (A) and PC-12 (B) whole cell lysates.

SELECT PRODUCT CITATIONS

- Gustavsson, A. 2004. Temporal dissection of β 1-integrin signaling indicates a role for p130Cas-Crk in filopodia formation. *J. Biol. Chem.* 279: 22893-22901.
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- Grimsley, C.M., et al. 2004. DOCK 180 and Elmo1 proteins cooperate to promote evolutionarily conserved Rac-dependent cell migration. *J. Biol. Chem.* 279: 6087-6097.
- Cote, J.F., et al. 2005. A novel and evolutionarily conserved PtdIns(3,4,5) P3-binding domain is necessary for DOCK 180 signalling. *Nat. Cell Biol.* 7: 797-807.
- Jarzynka, M.J., et al. 2007. Elmo1 and DOCK 180, a bipartite Rac1 guanine nucleotide exchange factor, promote human glioma cell invasion. *Cancer Res.* 67: 7203-7211.
- White, D.T., et al. 2010. GRASP and IPCEF promote ARF-to-Rac signaling and cell migration by coordinating the association of ARNO/cytohesin 2 with Dock180. *Mol. Biol. Cell* 21: 562-571.
- Kim, J.Y., et al. 2011. The RhoG/ELMO1/Dock180 signaling module is required for spine morphogenesis in hippocampal neurons. *J. Biol. Chem.* 286: 37615-37624.

PROTOCOLS

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



Try **DOCK 180 (E-2): sc-514080** or **DOCK 180 (H-4): sc-13163**, our highly recommended monoclonal alternatives to DOCK 180 (N-19). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **DOCK 180 (E-2): sc-514080**.