SANTA CRUZ BIOTECHNOLOGY, INC.

DOCK 2 (Q-16): sc-50923

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The Power to Question

BACKGROUND

The DOCK2 gene encodes dedicator of cytokinesis 2 (DOCK 2), a hematopoietic cell-specific CDM family protein that is indispensable for lymphocyte chemotaxis. DOCK 2 participates in the cytoskeletal rearrangements that are required for lymphocyte migration in response of chemokines. This peripheral membrane protein activates Rac 1 and Rac 2 small GTPases, while presumably acting as a guanine nucleotide exchange factor (GEF), which exchanges bound GDP for free GTP. DOCK 2 may also participate in IL-2 transcriptional activation through the activation of Rac 2. DOCK 2 contains one DHR-1 (CZH-1) domain, one DHR-2 (CZH-2) domain and one SH3 domain. The DHR-2 domain is a putative GEF activity mediator. The DOCK 2 protein also co-localizes with F-Actin, and demonstrates expression in several human tissues, with the highest levels observed in peripheral blood leukocytes, thymus, spleen and liver.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: DOCK2 (human) mapping to 5q35.1; Dock2 (mouse) mapping to 11 A5.

SOURCE

DOCK 2 (Q-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DOCK 2 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-50923 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DOCK 2 (Q-16) is recommended for detection of DOCK 2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 DOCK2 siRNA (h): sc-60545, DOCK2 shRNA Plasmid (h): sc-60545-SH and DOCK2 shRNA (h) Lentiviral Particles: sc-60545-V.

Molecular Weight of DOCK 2: 220 kDa.

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) 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.

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.