

DOCK 5 (N-15): sc-87695

BACKGROUND

DOCK 5 (dedicator of cytokinesis protein 5) is a 1,870 amino acid protein belonging to the DOCK family of cytokinesis-regulating proteins. This cytoplasmic 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 5 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. In mice, spontaneous mutation of the gene encoding DOCK 5 leads to deletion of the DHR-1 domain, which functions to bind phospholipids and assists in protein-protein interactions, resulting in rupture of lens cataract (RLC). Due to siRNA knockdown studies, it is suspected that DOCK 5 may also be an important mediator of Crkl/CrkL regulation of Caco-2 migration and spreading on COL4. There are two isoforms of DOCK 5 that exist as a result of alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: DOCK5 (human) mapping to 8p21.2; Dock5 (mouse) mapping to 14 D1.

SOURCE

DOCK 5 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of DOCK 5 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.

Blocking peptide available for competition studies, sc-87695 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DOCK 5 (N-15) is recommended for detection of DOCK 5 of mouse and 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); non cross-reactive with other DOCK family members.

DOCK 5 (N-15) is also recommended for detection of DOCK 5 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for DOCK 5 siRNA (h): sc-77473, DOCK 5 siRNA (m): sc-143135, DOCK 5 shRNA Plasmid (h): sc-77473-SH, DOCK 5 shRNA Plasmid (m): sc-143135-SH, DOCK 5 shRNA (h) Lentiviral Particles: sc-77473-V and DOCK 5 shRNA (m) Lentiviral Particles: sc-143135-V.

Molecular Weight of DOCK 5: 215 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.