

Dok-3 (D-18): sc-10476

BACKGROUND

Dok-1, Dok-2 and Dok-3 are members of a class of "docking" proteins which contain multiple tyrosine residues and putative SH2 binding sites. Dok-1 is a 62 kDa protein that associates with the Ras GTPase activating protein (Ras GAP) upon tyrosine phosphorylation. Dok-2 (also designated p56 Dok) has also been identified as a potential mediator of the effects of p210 Bcr-Abl. Dok-3 is an adapter involved in the recruitment of inhibitory molecules and is highly expressed in B cells and macrophages. Immunoreceptor-mediated cellular activation induces tyrosine phosphorylation of Dok-3. Upon phosphorylation, Dok-3 binds to 5' inositol phosphatase SHIP and the protein tyrosine kinase Csk. Dok-3 may play a significant role in the negative regulation of immunoreceptor signaling in hemopoietic cells.

REFERENCES

1. Wisniewski, D., Strife, A., Wojciechowicz, D., Lambek, C. and Clarkson, B. 1994. A 62 kDa tyrosine phosphoprotein constitutively present in primary chronic phase chronic myelogenous leukemia enriched lineage negative blast populations. *Leukemia* 8: 688-693.
2. Mayer, B.J., Hirai, H. and Sakai, R. 1995. Evidence that SH2 domains promote processive phosphorylation by protein-tyrosine kinases. *Curr. Biol.* 5: 296-305.

CHROMOSOMAL LOCATION

Genetic locus: Dok3 (mouse) mapping to 13 B1.

SOURCE

Dok-3 (D-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Dok-3 of mouse 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-10476 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Dok-3 (D-18) is recommended for detection of Dok-3 of mouse and rat 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 Dok-3 siRNA (m): sc-35213, Dok-3 shRNA Plasmid (m): sc-35213-SH and Dok-3 shRNA (m) Lentiviral Particles: sc-35213-V.

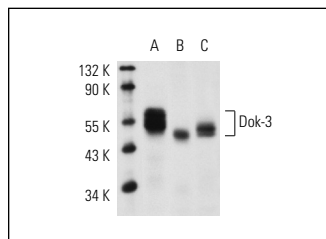
Molecular Weight of Dok-3: 58-62 kDa.

Positive Controls: RAW 264.7 whole cell lysate: sc-2211, rat spleen extract: sc-2397 or mouse spleen extract: sc-2391.

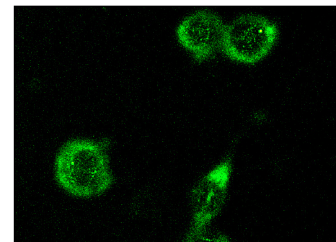
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



Dok-3 (D-18): sc-10476. Western blot analysis of Dok-3 expression in RAW 264.7 whole cell lysate (A) and rat spleen (B) and mouse spleen (C) tissue extracts.



Dok-3 (D-18): sc-10476. Immunofluorescence staining of methanol-fixed RAW 264.7 cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

1. Ng, C.H., Xu, S. and Lam, K.P. 2007. Dok-3 plays a nonredundant role in negative regulation of B-cell activation. *Blood* 110: 259-266.

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.

MONOS
Satisfaction
Guaranteed

Try **Dok-3 (F-7): sc-390007** or **Dok-3 (H-5): sc-373885**, our highly recommended monoclonal alternatives to Dok-3 (D-18).