SANTA CRUZ BIOTECHNOLOGY, INC.

Dok-1 (E-16): sc-46093

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Dok-1 associates with the Ras GTPase-activating protein (Ras GAP) upon tyrosine phosphorylation. Evidence suggests that Dok-1 (also designated p62dok) is a substrate of the constitutive tyrosine kinase activity of p210 Bcr-Abl, a fusion protein caused by the t(9;22) translocation and associated with chronic myelogenous leukemia. Dok-1, as well as the tyrosine kinase substrates IRS-1 and Cas, are members of a class of "docking" proteins which contain multiple tyrosine residues and putative SH2 binding sites. Dok-1 is suspected to be the substrate phosphorylated in response to stimulation by a number of growth factors, including PDGF, VEGF, Insulin and IGF. Dok-2 (also designated p56dok) has also been identified as a potential mediator of the effects of p210 Bcr-Abl.

REFERENCES

1. Wisniewski, D., et al. 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. Myers, M.G., et al. 1994. The IRS-1 signaling system. Trends Biochem. Sci. 19: 289-293.

CHROMOSOMAL LOCATION

Genetic locus: DOK1 (human) mapping to 2p13.1; Dok1 (mouse) mapping to 6 C3.

SOURCE

Dok-1 (E-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Dok-1 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-46093 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Dok-1 (E-16) is recommended for detection of Dok-1 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).

Dok-1 (E-16) is also recommended for detection of Dok-1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Dok-1 siRNA (h): sc-35210, Dok-1 siRNA (m): sc-35209, Dok-1 shRNA Plasmid (h): sc-35210-SH, Dok-1 shRNA Plasmid (m): sc-35209-SH, Dok-1 shRNA (h) Lentiviral Particles: sc-35210-V and Dok-1 shRNA (m) Lentiviral Particles: sc-35209-V.

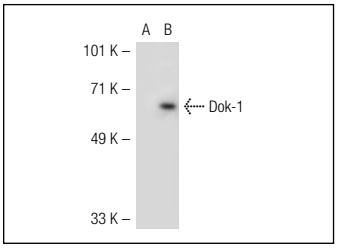
Molecular Weight of Dok-1: 62 kDa.

Positive Controls: Dok-1 (m): 293T Lysate: sc-119822, Jurkat whole cell lysate: sc-2204 or CTLL-2 cell lysate: sc-2242.

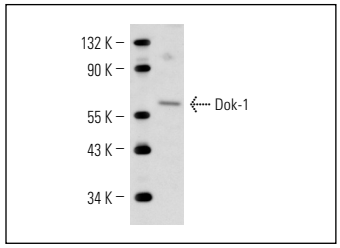
RECOMMENDED SECONDARY REAGENTS

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



vDok-1 (E-16): sc-46093. Western blot analysis of Dok-1 expression in non-transfected: sc-117752 (**A**) and mouse Dok-1 transfected: sc-119822 (**B**) 293T whole cell lysates.



Dok-1 (E-16): sc-46093. Western blot analysis of Dok-1 expression in Jurkat whole cell lysate.

SELECT PRODUCT CITATIONS

1. Demers, A., et al. 2009. A concerted kinase interplay identifies PPARγ as a molecular target of ghrelin signaling in macrophages. PLoS ONE 4: e7728.

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.