SANTA CRUZ BIOTECHNOLOGY, INC.

Dok-7 (S-17): sc-55169

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The downstream of kinase family (Dok1-7) are members of a class of "docking" proteins that include the tyrosine kinase substrates IRS-1 and Cas, which contain multiple tyrosine residues and putative SH2 binding sites. Based on their similarities, the Dok family of proteins can be divided into three subgroups: Dok-1/2/3, Dok-4/5/6 and Dok-7. Through its interaction with muscle-specific receptor kinase (MuSK), Dok-7 is crucial for neuromuscular synaptogenesis and for MuSK activation. Mice lacking Dok-7 do not form neuromuscular synapses nor acetylcholine receptor clusters. Mutations in the Dok-7 gene can cause congenital myasthenic syndromes (CMA)—recessively inherited disorders characterized by muscle weakness.

REFERENCES

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3. Crowder, R.J., Enomoto, H., Yang, M., Johnson, E.M. and Milbrandt, J. 2004. Dok-6, a Novel p62 Dok family member, promotes Ret-mediated neurite outgrowth. J. Biol. Chem. 279: 42072-42081.
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CHROMOSOMAL LOCATION

Genetic locus: DOK7 (human) mapping to 4p16.3; Dok7 (mouse) mapping to 5 B2.

SOURCE

Dok-7 (S-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Dok-7 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-55169 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

Dok-7 (S-17) is recommended for detection of Dok-7 of mouse 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 Dok-7 siRNA (h): sc-61852, Dok-7 siRNA (m): sc-61853, Dok-7 shRNA Plasmid (h): sc-61852-SH, Dok-7 shRNA Plasmid (m): sc-61853-SH, Dok-7 shRNA (h) Lentiviral Particles: sc-61852-V and Dok-7 shRNA (m) Lentiviral Particles: sc-61853-V.

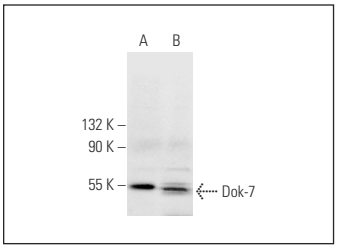
Molecular Weight of Dok-7: 55 kDa.

Positive Controls: mouse skeletal muscle extract: sc-364250 or human skeletal muscle extract: sc-363776.

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-7 (S-17): sc-55169. Western blot analysis of Dok-7 expression in mouse skeletal muscle (**A**) and human skeletal muscle (**B**) tissue extracts.

RESEARCH USE

For research use only, not for use in diagnostic procedures.