

Dok-7 (H-77): sc-50464

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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CHROMOSOMAL LOCATION

Genetic locus: DOK7 (human) mapping to 4p16.3.

SOURCE

Dok-7 (H-77) is a rabbit polyclonal antibody raised against amino acids 210-287 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.

APPLICATIONS

Dok-7 (H-77) is recommended for detection of Dok-7 of 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 shRNA Plasmid (h): sc-61852-SH and Dok-7 shRNA (h) Lentiviral Particles: sc-61852-V.

Molecular Weight of Dok-7: 55 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

SELECT PRODUCT CITATIONS

- Linnoila, J., Wang, Y., Yao, Y. and Wang Z.Z. 2008. A mammalian homolog of *Drosophila* tumorous imaginal discs, Tid1, mediates Agrin signaling at the neuromuscular junction. *Neuron* 60: 625-641.
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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
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Try **Dok-7 (A-7): sc-390856**, our highly recommended monoclonal alternative to Dok-7 (H-77).