

MRCK β (H-125): sc-48834

BACKGROUND

Protein kinases comprise a large group of encoded factors that regulate cellular processes by catalyzing the transfer of a phosphate group to a hydroxyl acceptor in serine, threonine or tyrosine residues. Myotonic dystrophy kinase-related Cdc42-binding (DMPK-like) kinases- α and β (MRCK- α , β) contain a cysteine-rich motif and a putative pleckstrin homology domain. MRCKs can phosphorylate nonmuscle Myosin light chain and influences actin-Myosin contractility. MRCK- α can phosphorylate and activate LIM kinases downstream of Cdc42, which leads to inactivation of ADF/Cofilin and to actin cytoskeletal reorganization. MRCK- α can also influence neurite outgrowth promoted by Cdc42 and Rac.

REFERENCES

- Hunter, T. 1995. Protein kinases and phosphatases: the yin and yang of protein phosphorylation and signaling. *Cell* 80: 225-236.
- Leung, T., Chen, X.Q., Tan, I., Manser, E. and Lim, L. 1998. Myotonic dystrophy kinase-related Cdc42-binding kinase acts as a Cdc42 effector in promoting cytoskeletal reorganization. *Mol. Cell. Biol.* 18: 130-140.

CHROMOSOMAL LOCATION

Genetic locus: CDC42BPB (human) mapping to 14q32.32; Cdc42bpb (mouse) mapping to 12 F1.

SOURCE

MRCK β (H-125) is a rabbit polyclonal antibody raised against amino acids 916-1040 mapping within an internal region of MRCK β 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.

APPLICATIONS

MRCK β (H-125) is recommended for detection of MRCK β of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

MRCK β (H-125) is also recommended for detection of MRCK β in additional species, including equine, canine and porcine.

Suitable for use as control antibody for MRCK β siRNA (h): sc-60064, MRCK β siRNA (m): sc-60065, MRCK β shRNA Plasmid (h): sc-60064-SH, MRCK β shRNA Plasmid (m): sc-60065-SH, MRCK β shRNA (h) Lentiviral Particles: sc-60064-V and MRCK β shRNA (m) Lentiviral Particles: sc-60065-V.

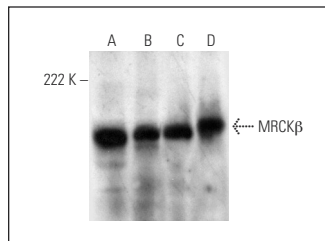
Molecular Weight of MRCK β : 190 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, NIH/3T3 whole cell lysate: sc-2210 or F9 cell lysate: sc-2245.

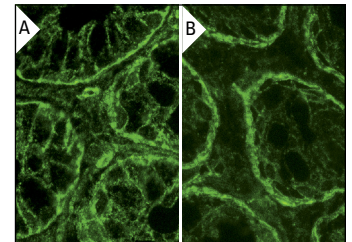
RECOMMENDED SECONDARY REAGENTS

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.

DATA



MRCK β (H-125): sc-48834. Western blot analysis of MRCK β expression in HeLa (A), NIH/3T3 (B), F9 (C) and NTERA-2 cl.D1 (D) whole cell lysates.



MRCK β (H-125): sc-48834. Immunofluorescence staining of normal mouse intestine frozen section showing membrane staining (A, B).

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.



Try **MRCK β (C-12): sc-374597** or **MRCK β (A-2): sc-390127**, our highly recommended monoclonal alternatives to MRCK β (H-125).