

N-RAP (E-15): sc-138040

BACKGROUND

Nebulin is a large filamentous protein specific to muscle tissue that may function as a "ruler" for Actin filament length. N-RAP (nebulin-related anchoring protein) is a 1,730 amino acid protein that may play a role in myofibril assembly and in mediating force transmission in cardiomyocytes. N-RAP localizes to the intercalated disks of cardiac muscle and the myotendinous junctions of skeletal muscle, where it is exclusively expressed. Existing as four alternatively spliced isoforms, N-RAP contains one N-terminal LIM domain and forty-four Nebulin repeats. N-RAP binds α -actinin and Filamin 2 during myofibril assembly and is also known to interact with Actin, KBTBD10, Talin-1 and vinculin. The gene encoding N-RAP maps to human chromosome 10q25.3 and mouse chromosome 19 D2.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: NRAP (human) mapping to 10q25.3; Nrap (mouse) mapping to 19 D2.

SOURCE

N-RAP (E-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of N-RAP of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-138040 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

N-RAP (E-15) is recommended for detection of N-RAP isoforms 1-4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

N-RAP (E-15) is also recommended for detection of N-RAP isoforms 1-4 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for N-RAP siRNA (h): sc-90390, N-RAP siRNA (m): sc-149773, N-RAP shRNA Plasmid (h): sc-90390-SH, N-RAP shRNA Plasmid (m): sc-149773-SH, N-RAP shRNA (h) Lentiviral Particles: sc-90390-V and N-RAP shRNA (m) Lentiviral Particles: sc-149773-V.

Molecular Weight of N-RAP: 198 kDa.

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) 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.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **N-RAP (H-5): sc-514480**, our highly recommended monoclonal alternative to N-RAP (E-15).