

myopalladin (72-J): sc-81810

BACKGROUND

Myopalladin, also known as MYPN or MYOP, is a 1,320 amino acid protein that localizes to both the cytoplasm and the nucleus and is a member of the Myotilin/palladin family. Expressed in fetal heart and adult skeletal muscle, myopalladin acts as a structural component of the sarcomere that tethers both skeletal and cardiac muscle to α -actinin. Myopalladin contains five Ig (immunoglobulin)-like domains and is bound to the sarcomere in the central I-band region and at the Z-line periphery. Overexpression of myopalladin is thought to disrupt proper sarcomeric function, indicating that proper myopalladin levels are essential for sarcomeric integrity. Defects in the gene encoding myopalladin are associated with idiopathic dilated cardiomyopathy (DCM), a disease characterized by an enlarged heart that does not function properly. Three isoforms of myopalladin exist due to alternative splicing events.

REFERENCES

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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.

PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: MYPN (human) mapping to 10q21.3.

SOURCE

myopalladin (72-J) is a mouse monoclonal antibody raised against recombinant myopalladin of human origin.

PRODUCT

Each vial contains 100 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

myopalladin (72-J) is recommended for detection of myopalladin of 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for myopalladin siRNA (h): sc-75851, myopalladin shRNA Plasmid (h): sc-75851-SH and myopalladin shRNA (h) Lentiviral Particles: sc-75851-V.

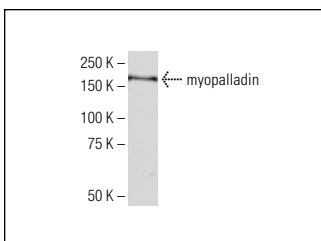
Molecular Weight of myopalladin: 145 kDa.

Positive Controls: HeLa nuclear extract: sc-2120.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), 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).

DATA



myopalladin (72-J): sc-81810. Western blot analysis of myopalladin expression in HeLa nuclear extract.

RESEARCH USE

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