

MOSPD3 (C-7): sc-514799

BACKGROUND

MOSPD3 (motile sperm domain-containing protein 3), also known as CDS3, is a 235 amino acid multi-pass membrane protein that contains one MSP (major sperm protein) domain. The MSP domain, a critical component of sperm motility, has a seven-stranded β sandwich and an immunoglobulin-like fold. MSP domains polymerize into helical, non-polar fragments that form a cytoskeleton made from intermeshed filaments. The intermeshed structure then assembles into large macromolecular complexes that play an important role in sperm movement. MOSPD3 is thought to be involved in development of the right ventricle, suggesting that the MSP domain may participate in cardiac development, as well as spermiogenesis. Three isoforms of MOSPD3 are expressed due to alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: MOSPD3 (human) mapping to 7q22.1; Mospd3 (mouse) mapping to 5 G2.

SOURCE

MOSPD3 (C-7) is a mouse monoclonal antibody raised against amino acids 99-160 mapping within an internal region of MOSPD3 of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

MOSPD3 (C-7) is recommended for detection of MOSPD3 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for MOSPD3 siRNA (h): sc-89840, MOSPD3 siRNA (m): sc-149514, MOSPD3 shRNA Plasmid (h): sc-89840-SH, MOSPD3 shRNA Plasmid (m): sc-149514-SH, MOSPD3 shRNA (h) Lentiviral Particles: sc-89840-V and MOSPD3 shRNA (m) Lentiviral Particles: sc-149514-V.

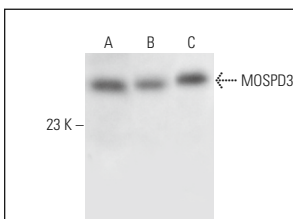
Molecular Weight of MOSPD3: 26 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, Raji whole cell lysate: sc-364236 or MIA PaCa-2 cell lysate: sc-2285.

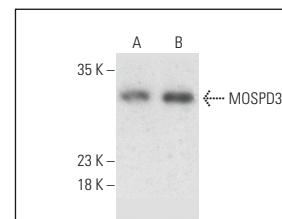
RECOMMENDED SUPPORT REAGENTS

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, UltraCruz® Blocking Reagent: sc-516214 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



MOSPD3 (C-7): sc-514799. Western blot analysis of MOSPD3 expression in Jurkat (A), Raji (B) and MIA PaCa-2 (C) whole cell lysates.



MOSPD3 (C-7): sc-514799. Western blot analysis of MOSPD3 expression in human testis (A) and human adrenal gland (B) tissue extracts.

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 for detailed protocols and support products.