

MOSPD3 (D-14): sc-131976

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 (D-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MOSPD3 of human origin.

STORAGE

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

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-131976 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MOSPD3 (D-14) is recommended for detection of MOSPD3 isoforms 1, 2 and 3 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); non cross-reactive with family members MOSPD1 or MOSPD2.

MOSPD3 (D-14) is also recommended for detection of MOSPD3 isoforms 1, 2 and 3 in additional species, including equine, canine, bovine and porcine.

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.

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.

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.