

# StARD9 (C-16): sc-67863

## BACKGROUND

The StARD (steroidogenic acute regulatory protein-related lipid transfer (START) domain containing) family of proteins is comprised of 15 different members. All members contain the characteristic START domain and are believed to play key roles in the metabolism and transport of lipids. The StARD proteins are grouped into six subfamilies based on their START domain sequences. StARD9, on its own, constitutes one of the six subfamilies. StARD9 is a very large (4,614 amino acids long) protein that contains one FHA domain, one kinesin-motor domain and one START domain. It is predominantly expressed in muscle, pancreas, prostate, lung and the central nervous system. Three different StARD9 isoforms exist due to alternative splicing events.

## REFERENCES

1. Kishida, T., et al. 2004. Targeted mutation of the MLN64 START domain causes only modest alterations in cellular sterol metabolism. *J. Biol. Chem.* 279: 19276-19285.
2. Ishikawa, T., et al. 2005. Sertoli cell expression of steroidogenic acute regulatory protein-related lipid transfer 1 and 5 domain-containing proteins and sterol regulatory element binding protein-1 are interleukin-1 $\beta$  regulated by activation of c-Jun N-terminal kinase and cyclooxygenase-2 and cytokine induction. *Endocrinology* 146: 5100-5111.
3. Alpy, F., et al. 2005. Give lipids a START: the StAR-related lipid transfer (START) domain in mammals. *J. Cell Sci.* 118: 2791-2801.
4. Halama, N., et al. 2006. Identification and characterization of the human StARD9 gene in the LGMD2A-region on chromosome 15q15 by in silico methods. *Int. J. Mol. Med.* 18: 653-656.
5. Kanno, K., et al. 2007. Interacting proteins dictate function of the minimal START domain phosphatidylcholine transfer protein/StARD2. *J. Biol. Chem.* 282: 30728-30736.
6. Nunez, B.S., et al. 2007. Hormonal regulation of the steroidogenic acute regulatory protein (StAR) in gonadal tissues of the Atlantic croaker (*Micropogonias undulatus*). *Gen. Comp. Endocrinol.* 150: 495-504.
7. Ran, Y., et al. 2008. StAR-like activity and molten globule behavior of StARD6, a male germ-line protein. *Biochemistry* 47: 2277-2288.

## CHROMOSOMAL LOCATION

Genetic locus: STARD9 (human) mapping to 15q15.2; Stard9 (mouse) mapping to 2 E5.

## SOURCE

StARD9 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of StARD9 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-67863 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

StARD9 (C-16) is recommended for detection of StAR-related lipid transfer protein 9 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).

StARD9 (C-16) is also recommended for detection of StAR-related lipid transfer protein 9 in additional species, including equine and canine.

Suitable for use as control antibody for StARD9 siRNA (h): sc-63083, StARD9 siRNA (m): sc-63084, StARD9 shRNA Plasmid (h): sc-63083-SH, StARD9 shRNA Plasmid (m): sc-63084-SH, StARD9 shRNA (h) Lentiviral Particles: sc-63083-V and StARD9 shRNA (m) Lentiviral Particles: sc-63084-V.

Molecular Weight of StARD9: 507 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.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.