### SANTA CRUZ BIOTECHNOLOGY, INC.

# StARD9 (H-168): sc-135272



# BACKGROUND

The StARD (steroidogenic acute regulatory protein-related lipid transfer (START) domain containing) family of proteins is comprised of fifteen 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

- 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.
- 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.
- Kanno, K., et al. 2007. Interacting proteins dictate function of the minimal START domain phosphatidylcholine transfer protein/StARD2. J. Biol. Chem. 282: 30728-30736.

## CHROMOSOMAL LOCATION

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

#### SOURCE

StARD9 (H-168) is a rabbit polyclonal antibody raised against amino acids 4398-4565 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.

#### **STORAGE**

Store at 4° C, \*\*D0 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.

#### APPLICATIONS

StARD9 (H-168) is recommended for detection of StARD9 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

StARD9 (H-168) is also recommended for detection of StARD9 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 (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.

Positive Controls: HeLa whole cell lysate: sc-2200, NIH/3T3 whole cell lysate: sc-2210 or AT3B-1 whole cell lysate: sc-364372.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

#### DATA



StARD9 (H-168): sc-135272. Western blot analysis of StARD9 expression in HeLa (A), NIH/3T3 (B), AT3B-1 (C) and PC-3 (D) whole cell lysates.

#### PROTOCOLS

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