

StARD7 (C-20): sc-67855

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. PC-TP (StARD2), StARD7, StARD10 and GPBP (StARD11) constitute one subfamily, namely the STARD2/PCTP group. StARD7, also known as GTT1 (gestational trophoblastic tumor 1), is a widely expressed protein with a possible function in phospholipid transport. The sequence of its START domain suggests that StARD7 may bind to charged lipids. StARD7 is overexpressed in a number of cancer cell lines and thus may be involved in tumor signaling mediated by phospholipids.

REFERENCES

1. Soccio, R.E. and Breslow, J.L. 2003. StAR-related lipid transfer (START) proteins: mediators of intracellular lipid metabolism. *J. Biol. Chem.* 278: 22183-22186.
2. Durand, S., et al. 2004. GTT1/StARD7, a novel phosphatidylcholine transfer protein-like highly expressed in gestational trophoblastic tumour: cloning and characterization. *Placenta* 25: 37-44.
3. Angeletti, S., et al. 2004. Surface activity and interaction of StARD7 with phospholipid monolayers. *Biochem. Biophys. Res. Commun.* 314: 181-185.
4. Alpy, F. and Tomasetto, C. 2005. Give lipids a START: the StAR-related lipid transfer (START) domain in mammals. *J. Cell Sci.* 118: 2791-2801.
5. Soccio, R.E., et al. 2005. Differential gene regulation of StarD4 and StarD5 cholesterol transfer proteins. Activation of StarD4 by sterol regulatory element-binding protein-2 and StarD5 by endoplasmic reticulum stress. *J. Biol. Chem.* 280: 19410-19418.
6. Oluyoye, M.A., et al. 2005. StARD10, a START domain protein overexpressed in breast cancer, functions as a phospholipid transfer protein. *J. Biol. Chem.* 280: 27436-27442.

CHROMOSOMAL LOCATION

Genetic locus: STARD7 (human) mapping to 2q11.2; Stard7 (mouse) mapping to 2 F1.

SOURCE

StARD7 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of StARD7 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-67855 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

StARD7 (C-20) is recommended for detection of StAR-related lipid transfer protein 7 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

StARD7 (C-20) is also recommended for detection of StAR-related lipid transfer protein 7 in additional species, including equine.

Suitable for use as control antibody for StARD7 siRNA (h): sc-63078, StARD7 siRNA (m): sc-63079, StARD7 shRNA Plasmid (h): sc-63078-SH, StARD7 shRNA Plasmid (m): sc-63079-SH, StARD7 shRNA (h) Lentiviral Particles: sc-63078-V and StARD7 shRNA (m) Lentiviral Particles: sc-63079-V.

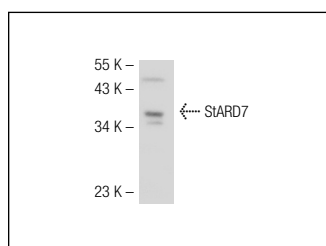
Molecular Weight of StARD7: 35 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200

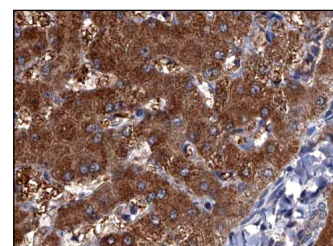
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



StARD7 (C-20): sc-67855. Western blot analysis of StARD7 expression in HeLa whole cell lysate.



StARD7 (C-20): sc-67855. Immunoperoxidase staining of formalin fixed, paraffin-embedded human liver tissue showing cytoplasmic staining of hepatocytes and bile duct cells at high magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

STORAGE

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