SANTA CRUZ BIOTECHNOLOGY, INC.

StARD10 (C-11): sc-365580

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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/PC-TP group. StARD10, also known as PC-TP2, PC-TPL, NY-CO-28, CGI-52 or SDCCAG28, is widely expressed and functions in phospholipid transfer, binding to phosphatidylcholine and phosphatidylethanolamine. StARD10 can be found in sperm flagellum, potentially functioning as an enzyme involved in energy metabolism, and its expression is developmentally regulated in testis and mammary glands. StARD10 activity can be inhibited via phosphorylation by casein kinase II.

REFERENCES

1. Olayioye, M.A., et al. 2004. The phosphoprotein StARD10 is overexpressed in breast cancer and cooperates with ErbB receptors in cellular transformation. Cancer Res. 64: 3538-3544.
2. Alpy, F., et al. 2005. Give lipids a START: the StAR-related lipid transfer (START) domain in mammals. J. Cell Sci. 118: 2791-2801.
3. 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.

CHROMOSOMAL LOCATION

Genetic locus: STARD10 (human) mapping to 11q13.4; Stard10 (mouse) mapping to 7 E3.

SOURCE

StARD10 (C-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 71-99 within an internal region of StARD10 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

StARD10 (C-11) is available conjugated to agarose (sc-365580 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-365580 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365580 PE), fluorescein (sc-365580 FITC), Alexa Fluor® 488 (sc-365580 AF488), Alexa Fluor® 546 (sc-365580 AF546), Alexa Fluor® 594 (sc-365580 AF594) or Alexa Fluor® 647 (sc-365580 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-365580 AF680) or Alexa Fluor® 790 (sc-365580 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-365580 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

StARD10 (C-11) is recommended for detection of StARD10 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

StARD10 (C-11) is also recommended for detection of StARD10 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for StARD10 siRNA (h): sc-106575, StARD10 siRNA (m): sc-153879, StARD10 shRNA Plasmid (h): sc-106575-SH, StARD10 shRNA Plasmid (m): sc-153879-SH, StARD10 shRNA (h) Lentiviral Particles: sc-106575-V and StARD10 shRNA (m) Lentiviral Particles: sc-153879-V.

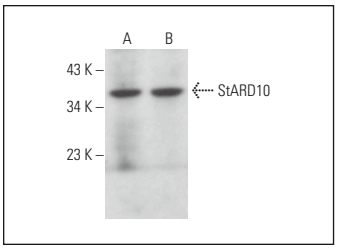
Molecular Weight of StARD10: 35 kDa.

Positive Controls: SK-BR-3 cell lysate: sc-2218, rat liver extract: sc-2395 or mouse liver extract: sc-2256.

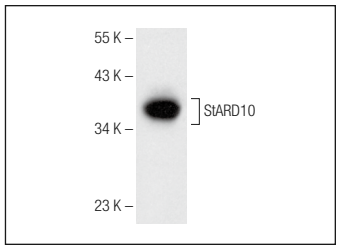
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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-IgGκ BP-FITC: sc-516140 or m-IgGκ 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



StARD10 (C-11): sc-365580. Western blot analysis of StARD10 expression in mouse liver (**A**) and rat liver (**B**) tissue extracts.



StARD10 (C-11): sc-365580. Western blot analysis of StARD10 expression in SK-BR-3 whole cell lysate.

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.