

PSS2 (Y-16): sc-51414

BACKGROUND

Phosphatidylserine synthases (PSS) are widespread, ancestral enzymes with a highly conserved function. PSS is a membrane protein responsible for catalyzing the calcium-dependent base exchange of serine with existing phospholipid head groups in the biosynthesis of phosphatidylserine (PtdSer), a major anionic phospholipid expressed on the inner layer of the plasma membrane. Two forms of PSS exist, PSS1 and PSS2, both localizing to the mitochondria-associated membrane. These two forms are encoded by different genes but share very similar characteristics, differing only in their substrate specificity. The primary substrate for PSS1 is phosphatidylcholine and the substrate for PSS2 is phosphatidylethanolamine. PSS1 and PSS2 are directly inhibited by PtdSer and this inhibition is important for feedback control of PtdSer synthesis. Cells overexpressing PSS1 and PSS2 are significantly resistant to UV-induced apoptosis.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PTDSS2 (human) mapping to 11p15; Ptdss2 (mouse) mapping to 7 F5.

SOURCE

PSS2 (Y-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of PSS2 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-51414 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PSS2 (Y-16) is recommended for detection of PSS2 of mouse, rat, human and hamster 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

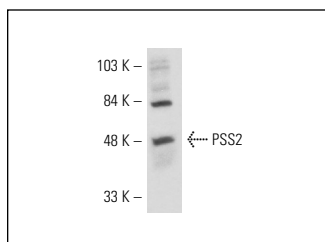
PSS2 (Y-16) is also recommended for detection of PSS2 in additional species, including avian.

Suitable for use as control antibody for PSS2 siRNA (h): sc-72367, PSS2 siRNA (m): sc-72368, PSS2 shRNA Plasmid (h): sc-72367-SH, PSS2 shRNA Plasmid (m): sc-72368-SH, PSS2 shRNA (h) Lentiviral Particles: sc-72367-V and PSS2 shRNA (m) Lentiviral Particles: sc-72368-V.

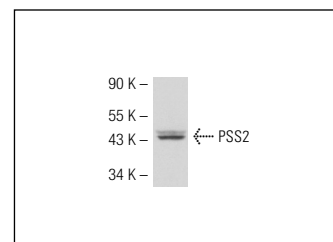
Molecular Weight of PSS2: 52 kDa.

Positive Controls: CHO-K1 cell lysate: sc-3809.

DATA



PSS2 (Y-16): sc-51414. Western blot analysis of PSS2 expression in CHO-K1 whole cell lysate.



PSS2 (Y-16): sc-51414. Western blot analysis of PSS2 expression in HeLa 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.

PROTOCOLS

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