PISD (E-15): sc-86197



The Power to Question

BACKGROUND

Enzymes known as phosphatidylserine decarboxylases (PSDs) catalyze the formation of phosphatidylethanolamine from phosphatidylserine via phosphatidylserine decarboxylation. Type I PSDs contain LGST motifs and are found in bacteria and eukaryotic mitochondria, whereas type II PSDs contain GGST motifs and are found in eukaryotic endomembrane systems. PISD (phosphatidylserine decarboxylase), also known as phosphatidylserine decarboxylase proenzyme, PSDC, PSD, PSSC, DJ858B16, dJ858B16.2 or DKFZp566G2246, is a 408 amino acid a type I phosphatidylserine decarboxylase that localizes to the inner mitochondrial membrane. PISD contains a conserved LGST motif which is cleaved to produce two isoforms known as PISD alpha and PISD β . PISD is capable of forming a heterodimer and is highly expressed in liver and testis. The gene encoding PISD maps to human chromosome 22q12.2.

CHROMOSOMAL LOCATION

Genetic locus: PISD (human) mapping to 22q12.2; Pisd (mouse) mapping to 5 B1.

SOURCE

PISD (E-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of PISD of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-86197 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

PISD (E-15) is recommended for detection of PISD of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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).

PISD (E-15) is also recommended for detection of PISD in additional species, including canine, bovine, porcine and avian.

Suitable for use as control antibody for PISD siRNA (h): sc-76147, PISD siRNA (m): sc-152277, PISD shRNA Plasmid (h): sc-76147-SH, PISD shRNA Plasmid (m): sc-152277-SH, PISD shRNA (h) Lentiviral Particles: sc-76147-V and PISD shRNA (m) Lentiviral Particles: sc-152277-V.

Molecular Weight of PISD isoform 1: 47 kDa.

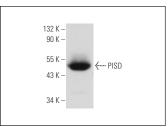
Molecular Weight of PISD isoform 2: 43 kDa.

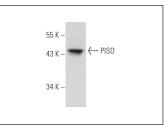
Positive Controls: JAR cell lysate: sc-2276 or K-562 whole cell lysate: sc-2203.

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™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 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™ Mounting Medium: sc-24941.

DATA





PISD (E-15): sc-86197. Western blot analysis of PISD expression in JAR whole cell lysate.

PISD (E-15): sc-86197. Western blot analysis of PISD expression in K-562 whole cell lysate.

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.



Try PISD (H-2): sc-390070 or PISD (D-9): sc-514884, our highly recommended monoclonal alternatives to PISD (E-15).

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