SANTA CRUZ BIOTECHNOLOGY, INC.

PROSC (S-17): sc-87371

BACKGROUND

PROSC (proline synthetase co-transcribed bacterial homolog protein) is a 275 amino acid ubiquitously expressed enzyme that is highly conserved from bacteria to mammals. The gene encoding PROSC is cotranscribed with proline sythetase. PROSC requires the cofactor pyridoxal phosphate, the active form of vitamin B6 that acts in all transamination reactions. The PROSC gene maps to human chromosome 8, which is made up of nearly 146 million bases and encodes about 800 genes. Translocation of portions of chromosome 8 with amplifications of the c-Myc gene are found in some leukemias and lymphomas, and are typically associated with a poor prognosis. Portions of chromosome 8 have been linked to schizophrenia and bipolar disorder. Chromosome 8 is also associated with Pfeiffer syndrome, congenital hypothyroidism and Waardenburg syndrome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PROSC (human) mapping to 8p12; Prosc (mouse) mapping to 8 A2.

RESEARCH USE

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

SOURCE

PROSC (S-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of PROSC 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-87371 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PROSC (S-17) is recommended for detection of PROSC 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

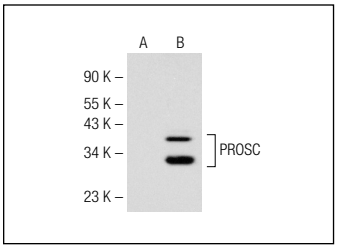
PROSC (S-17) is also recommended for detection of PROSC in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for PROSC siRNA (h): sc-77811, PROSC siRNA (m): sc-152482, PROSC shRNA Plasmid (h): sc-77811-SH, PROSC shRN A Plasmid (m): sc-152482-SH, PROSC shRNA (h) Lentiviral Particles: sc-77811-V and PROSC shRNA (m) Lentiviral Particles: sc-152482-V.

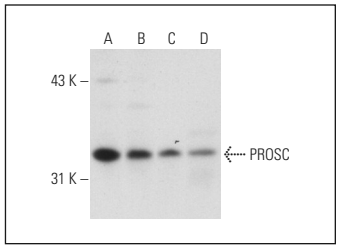
Molecular Weight of PROSC: 30 kDa.

Positive Controls: Ramos cell lysate: sc-2216, K-562 whole cell lysate: sc-2203 or PROSC (h): 293T Lysate: sc-177782.

DATA



PROSC (S-17): sc-87371. Western blot analysis of PROSC expression in non-transfected: sc-117752 (**A**) and human PROSC transfected: sc-177782 (**B**) 293T whole cell lysates.



PROSC (S-17): sc-87371. Western blot analysis of PROSC expression in Jurkat (**A**), K-562 (**B**), Ramos (**C**) and Hep G2 (**D**) whole cell lysates.

STORAGE

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

PROTOCOLS

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