# PROSC (T-17): sc-87372



The Power to Question

#### **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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- Ikegawa, S., Isomura, M., Koshizuka, Y. and Nakamura, Y. 1999. Cloning and characterization of human and mouse PROSC (proline synthetase co-transcribed) genes. J. Hum. Genet. 44: 337-342.
- 3. Kashino, G., Kodama, S., Suzuki, K., Oshimura, M. and Watanabe, M. 2001. Preferential expression of an intact WRN gene in Werner syndrome cell lines in which a normal chromosome 8 has been introduced. Biochem. Biophys. Res. Commun. 289: 111-115.
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## CHROMOSOMAL LOCATION

Genetic locus: PROSC (human) mapping to 8p11.23; Prosc (mouse) mapping to 8 A2.

#### **SOURCE**

PROSC (T-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PROSC of human origin.

# **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-87372 P, (100  $\mu$ 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**

PROSC (T-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 (T-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 shRNA Plasmid (m): sc-152482-SH, PROSC shRNA (h) Lentiviral Particles: sc-77811-V and PROSC shRNA (m) Lentiviral Particles: sc-152482-V.

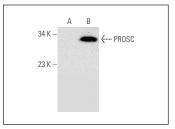
Molecular Weight of PROSC: 30 kDa.

Positive Controls: PROSC (h): 293T Lysate: sc-177782, Jurkat whole cell lysate: sc-2204 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 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.

#### DATA



PROSC (T-17): sc-87372. Western blot analysis of PROSC expression in non-transfected: sc-117752 (A) and human PROSC transfected: sc-177782 (B) 293T whole cell Ivsates.

## **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.

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