

PROX2 (T-19): sc-248307

BACKGROUND

Homeodomain proteins are key regulators in the growth and development of tissues undergoing morphogenesis. PROX2 (prospero homeobox 2), also known as homeobox prospero-like protein PROX2, is a 592 amino acid protein that localizes to nucleus and belongs to the prospero homeobox family. Conserved in chimpanzee, bovine, mouse and rat, PROX2 exists as two alternatively spliced isoforms. Similar to PROX1, PROX2 contains one prospero-type homeobox DNA-binding domain. PROX2 functions as a transcriptional activator and contains an N-terminal region activation domain. Although expressed during embryogenesis, PROX2 is not essential for embryonic development, horizontal cell generation or fertility, in contrast to PROX1. PROX2 is also expressed in adult testis. The gene that encodes PROX2 maps to human chromosome 14q24.3.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Prox2 (mouse) mapping to 12 D2.

SOURCE

PROX2 (T-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of PROX2 of mouse origin.

STORAGE

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

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-248307 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PROX2 (T-19) is recommended for detection of PROX2 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with PROX1.

Suitable for use as control antibody for PROX2 siRNA (m): sc-152490, PROX2 shRNA Plasmid (m): sc-152490-SH and PROX2 shRNA (m) Lentiviral Particles: sc-152490-V.

Molecular Weight of PROX2 isoforms: 66/41 kDa.

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) 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.

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.