



Nanos1 (G-24): sc-133804

BACKGROUND

Nanos1, also known as NOS1, is a 292 amino acid protein that localizes to the perinuclear region of the cytoplasm and contains one nanos-type zinc finger. Expressed at high levels in spermatogonia and present at lower levels in fetal ovaries, Nanos1 forms a complex with Pumilio 2 and functions to regulate the translation of select mRNAs, specifically via association with the 3'-UTR of its mRNA targets. Additionally, Nanos1 is required for the establishment and maintenance of germline stem cells, as it prevents their premature entry into oogenesis. The gene encoding Nanos1 maps to human chromosome 10, which houses over 1,200 genes and comprises nearly 4.5% of the human genome. Defects in some of the genes that map to chromosome 10 are associated with Charcot-Marie tooth disease, Jackson-Weiss syndrome, Usher syndrome, nonsyndromic deafness, Wolman's syndrome, Cowden syndrome, multiple endocrine neoplasia type 2 and porphyria.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: NANOS1 (human) mapping to 10q26.11.

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.

SOURCE

Nanos1 (G-24) is a Protein A purified rabbit polyclonal antibody raised against synthetic Nanos1 peptide of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

Nanos1 (G-24) is recommended for detection of Nanos1 of 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Nanos1 siRNA (h): sc-75864, Nanos1 shRNA Plasmid (h): sc-75864-SH and Nanos1 shRNA (h) Lentiviral Particles: sc-75864-V.

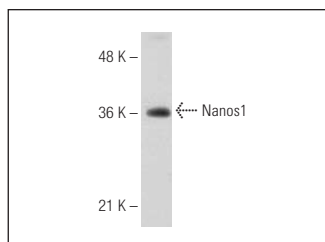
Molecular Weight of Nanos1: 32 kDa.

Positive Controls: T-47D cell lysate: sc-2293 or Hep G2 cell lysate: sc-2227.

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).

DATA



Nanos1 (G-24): sc-133804. Western blot analysis of Nanos1 expression in Hep G2 whole cell lysate.

PROTOCOLS

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