

## NANOS2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP18474c

### Specification

# NANOS2 Antibody (Center) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region WB,E <u>P60321</u> <u>NP\_001025032.1</u> Human Rabbit Polyclonal Rabbit IgG 15132 58-85

## NANOS2 Antibody (Center) - Additional Information

Gene ID 339345

Other Names Nanos homolog 2, NOS-2, NANOS2, NOS2

**Target/Specificity** This NANOS2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 58-85 amino acids from the Central region of human NANOS2.

Dilution WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** NANOS2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

### NANOS2 Antibody (Center) - Protein Information

Name NANOS2

Synonyms NOS2



**Function** Plays a key role in the sexual differentiation of germ cells by promoting the male fate but suppressing the female fate. Represses the female fate pathways by suppressing meiosis, which in turn results in the promotion of the male fate. Maintains the suppression of meiosis by preventing STRA8 expression, which is required for premeiotic DNA replication, after CYP26B1 is decreased. Regulates the localization of the CCR4-NOT deadenylation complex to P-bodies and plays a role in recruiting the complex to trigger the degradation of mRNAs involved in meiosis. Required for the maintenance of the spermatogonial stem cell population. Not essential for the assembly of P-bodies but is required for the maintenance of their normal state (By similarity).

#### **Cellular Location**

Cytoplasm. Cytoplasm, P-body. Cytoplasm, perinuclear region. Note=Localizes at P-bodies during gonocyte development (By similarity). More abundant in perinuclear region of the cytoplasm of the germ cells of the adult testis

### **Tissue Location**

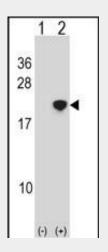
Testis and ovary. Expression found in several spermatogenic stages: in cells on the periphery of the tubules which could correspond to spermatogonia, in spermatocytes and in round spermatids (at protein level).

## NANOS2 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- <u>Blocking Peptides</u>
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- <u>Cell Culture</u>

## NANOS2 Antibody (Center) - Images



Western blot analysis of NANOS2 (arrow) using rabbit polyclonal NANOS2 Antibody (Center) (Cat. #AP18474c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the NANOS2 gene.

### NANOS2 Antibody (Center) - Background



NANOS2 is required to support proliferation and self-renewal of proximal germ cells in males only. Probably regulates translation of specific mRNAs by associating with the 3'-UTR of mRNA targets. Essential for spermatogonia formation (By similarity).

## NANOS2 Antibody (Center) - References

Kusz, K.M., et al. Mol. Hum. Reprod. 15(3):165-171(2009) Chang, H.R., et al. Arch. Dermatol. Res. 295(7):293-296(2003) Tsuda, M., et al. Science 301(5637):1239-1241(2003) Jaruzelska, J., et al. Dev. Genes Evol. 213(3):120-126(2003)