

Nanog (ANT0079R) Rabbit mAb

CatalogNo: ANT8110 **Recombinant** 

Formulation: PBS,50%glycerol,0.05%Proclin 300,0.05%BSA
Quantity : 100 ug/vial

Host Species

- Rabbit
- Human

Reactivity

- WB,IHC,IF,IP,ELISA

Applications

MW

- 42kD (Calculated)
- 42kD (Observed)

Isotype

- IgG,Kappa

Recommended Dilution Ratios

IHC 1:200-1000

WB 1:1000-5000

IF 1:200-1000

ELISA 1:5000-20000

IP 1:50-200

Storage

Storage* -15°C to -25°C/1 year(Do not lower than -25°C)

Basic Information

Clonality Monoclonal

Clone Number ANT0079R

Target Information

Endogenous

Gene name NANOG
Protein Name Homeobox protein NANOG

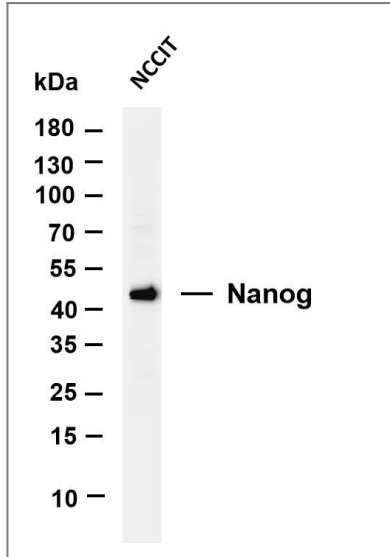
Organism	Gene ID	UniProt ID
Human	79923 ;	Q9H9S0 ;
Mouse		Q80Z64 ;

Cellular Localization Nucleus

Tissue specificity Expressed in testicular carcinoma and derived germ cell tumors (at protein level). Expressed in fetal gonads, ovary and testis. Also expressed in ovary teratocarcinoma cell line and testicular embryonic carcinoma. Not expressed in many somatic organs and oocytes.

Function developmental stage:Expressed in embryonic stem (ES) and carcinoma (EC) cells. Expressed in inner cell mass (ICM) of the blastocyst and gonocytes between 14 and 19 weeks of gestation (at protein level). Not expressed in oocytes, unfertilized oocytes, 2-16 cell embryos and early morula (at protein level). Expressed in embryonic stem cells (ES). Expression decreases with ES differentiation.,Function:May act as a transcription regulator (By similarity). When overexpressed, promotes cells to enter into S phase and proliferation.,Function:Transcription regulator involved in inner cell mass and embryonic stem (ES) cells proliferation and self-renewal. Imposes pluripotency on ES cells and prevents their differentiation towards extraembryonic endoderm and trophectoderm lineages. Blocks bone morphogenetic protein-induced mesoderm differentiation of ES cells by physically interacting with SMAD1 and interfering with the recruitment of coactivators to the active SMAD transcriptional complexes (By similarity). Acts as a transcriptional activator or repressor (By similarity). Binds optimally to the DNA consensus sequence 5'TAAT[GT][GT]-3' or 5'-[CG][GA][CG]C[GC]ATTAN[GC]-3' (By similarity). When overexpressed, promotes cells to enter into S phase and proliferation.,miscellaneous:Almost identical to NANOG. There are only one change in the inferred amino acid sequence from 'Gln-253' in NANOG to His-253 in NANOGP8.,miscellaneous:Exists an other tandem duplicated non-processed pseudogene (NANOGP1) and 10 other NANOG-related nucleotide sequences located on different chromosomes, all of which are processed pseudogenes lacking introns (NANOGP2 to NANOGP11); except NANOGP8 which is a retrogene.,online information:Nanog entry,similarity:Belongs to the Nanog homeobox family.,similarity:Contains 1 homeobox DNA-binding domain.,subunit:Interacts with SMAD1 and SALL4.,tissue specificity:Expressed in osteosarcoma cancer cell line (at protein level) (Probable). Expressed in tumor uterine cervix, breast and urinary bladder tissues, and also osteosarcoma, hepatoma, and breast adenocarcinoma cancer cell lines.,tissue specificity:Expressed in testicular carcinoma and derived germ cell tumors (at protein level). Expressed in fetal gonads, ovary and testis. Also expressed in ovary teratocarcinoma cell line and testicular embryonic carcinoma. Not expressed in many somatic organs and oocytes.,

Validation Data



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Nanog (ANT0079R) antibody. The HRPconjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: NCCIT Predicted band size: 42kDa Observed band size:

42kDa

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Contact Antagene Inc Tel 1-866-964-2589 Email: info@antageneinc.com