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# Nanog Antibody

Rabbit mAb
Catalog # AP90614

## Product Information

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|---|---|
| **Application** | WB, IHC, IF, FC, ICC, IHF |
| **Primary Accession** | Q9H9S0 |
| **Reactivity** | Human |
| **Clonality** | Monoclonal |
| **Other Names** | Homeobox transcription factor Nanog |
| **Isotype** | Rabbit IgG |
| **Host** | Rabbit |
| **Calculated MW** | 34620 |

## Additional Information

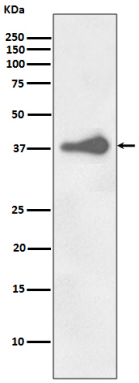
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|---|---|
| **Dilution** | WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 FC 1:50 |
| **Purification** | Affinity-chromatography |
| **Immunogen** | A synthesized peptide derived from human Nanog |
| **Description** | Transcription regulator involved 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. Acts as a transcriptional activator or repressor By similarity. |
| **Storage Condition and Buffer** | Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle. |

## Protein Information

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| **Name** | NANOG |
| **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. Acts as a transcriptional activator or repressor. Binds optimally to the DNA consensus sequence 5'-TAAT[GT][GT]-3' or 5'-[CG][GA][CG]C[GC]ATTAN[GC]- 3'. Binds to the POU5F1/OCT4 promoter (PubMed:25825768). Able to autorepress its expression in differentiating (ES) cells: binds to its own promoter following interaction with ZNF281/ZFP281, leading to recruitment of the NuRD complex and subsequent repression of expression. When overexpressed, promotes cells to enter into S phase and proliferation. |

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| **Cellular Location** | Nucleus {ECO:0000255\|PROSITE-ProRule:PRU00108, ECO:0000269\|PubMed:15983365} |
| **Tissue Location** | 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. |

## Images




Western blot analysis of Nanog expression in NCCIT cell lysate.

Image not found : 202311/AP90614-IHC.jpg

Immunohistochemical analysis of paraffin-embedded rat testis, using Nanog Antibody.

Image not found : 202311/AP90614-IF.jpg

Immunofluorescent analysis of NCCIT cells, using Nanog Antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.