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# Anti-NANOG Antibody

Catalog # AP54003

## Product Information

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| **Application** | WB |
| **Primary Accession** | Q9H9S0 |
| **Other Accession** | Q8N7R0 |
| **Reactivity** | Human, Mouse, Rat, Mk |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 34620 |

## Additional Information

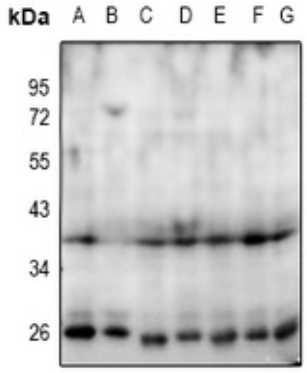
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| **Gene ID** | 79923 |
| **Other Names** | Homeobox protein NANOG; Homeobox transcription factor Nanog; hNanog |
| **Target/Specificity** | KLH-conjugated synthetic peptide encompassing a sequence within the center region of human NANOG. The exact sequence is proprietary. |
| **Dilution** | WB~~1/500 - 1/1000 |
| **Format** | Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide. |
| **Storage** | Store at -20 °C.Stable for 12 months from date of receipt |

## 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 A2780 (A), SKOVCAR3 (B), Hela (C), PC3 (D), rat testis (E), mouse testis (F), mouse embryo (G) whole cell lysates. (Predicted band size: 34; 26 kD; Observed band size: 38; 26 kD)

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