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NANOG Antibody (C-Terminus)
Goat Polyclonal Antibody
Catalog # ALS12615

Specification

NANOG Antibody (C-Terminus) - Product Information

Application	**WB, IHC**
Primary Accession	Q9H9S0
Reactivity	**Human**
Host	**Goat**
Clonality	**Polyclonal**
Calculated MW	**35kDa KDa**

NANOG Antibody (C-Terminus) - Additional Information

Gene ID 79923

Other Names
Homeobox protein NANOG, Homeobox transcription factor Nanog, hNanog, NANOG

Target/Specificity
Human NANOG.

Reconstitution & Storage
Store at -20°C. Minimize freezing and thawing.

Precautions
NANOG Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

NANOG Antibody (C-Terminus) - Protein Information

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.

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.

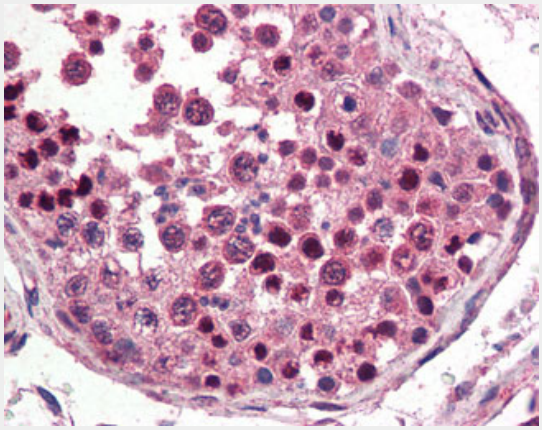
NANOG Antibody (C-Terminus) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

NANOG Antibody (C-Terminus) - Images

Antibody (0.05 ug/ml) staining of HeLa (nuclear) cell lysate (35 ug protein in RIPA buffer).



Anti-NANOG antibody IHC of human testis.

NANOG Antibody (C-Terminus) - Background

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NANOG Antibody (C-Terminus) - References

Mitsui K.,et al.Cell 113:631-642(2003).
Clark A.T.,et al.Stem Cells 22:169-179(2004).
Kim J.S.,et al.Exp. Mol. Med. 37:601-607(2005).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.