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Goat Anti-Nanog Antibody (internal region)

Purified Goat Polyclonal Antibody
Catalog # AF4184a

Specification

Goat Anti-Nanog Antibody (internal region) - Product Information

Application	**WB**
Primary Accession	Q80Z64
Other Accession	71950(mouse), NP_082292.1
Reactivity	**Mouse**
Predicted	**Mouse**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**0.5**
Calculated MW	**34240**

Goat Anti-Nanog Antibody (internal region) - Additional Information

Gene ID 71950

Other Names
Nanog; Nanog homeobox; 2410002E02Rik, ENK, ecat4; ES cell-associated protein 4; early embryo specific expression NK family; early embryo specific expression NK-type homeobox protein; homeobox protein NANOG; homeobox transcription factor Nanog

Format
Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and thawing.

Immunogen
Peptide with sequence C-DLEVNLEATRESHAH, from the internal region of the protein sequence according to NP_082292.1 .

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-Nanog Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-Nanog Antibody (internal region) - Protein Information

Name Nanog

Synonyms Ecat4, Enk

Function
Transcription regulator involved in inner cell mass and embryonic stem (ES) cells proliferation and self-renewal (PubMed:25825768). 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 (By similarity). 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:15582778}

Tissue Location
Not expressed in oocytes and spermatogonia (at protein level). Not expressed in many somatic organs, ovary, testis, fibroblast and hematopoietic cell lines.

Goat Anti-Nanog Antibody (internal region) - 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

Goat Anti-Nanog Antibody (internal region) - Images

AF4184a (0.5 µg/ml) staining of NIH3T3 lysate (35 µg protein in RIPA buffer). Primary incubation

was 1 hour. Detected by chemiluminescence.

Goat Anti-Nanog Antibody (internal region) - References

Nanog reverses the effects of organismal aging on mesenchymal stem cell proliferation and myogenic differentiation potential. Han J, Mistriotis P, Lei P, Wang D, Liu S, Andreadis ST. Stem cells (Dayton, Ohio) 2012 Dec 30 (12): 2746-59.