

**Rabbit Anti-Nanog Polyclonal Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP52287****Specification****Rabbit Anti-Nanog Polyclonal Antibody - Product Information**

Application	WB, IHC-P
Primary Accession	<a href="#">Q80Z64</a>
Reactivity	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	34240

**Rabbit Anti-Nanog Polyclonal Antibody - Additional Information****Gene ID** 71950**Other Names**

ENK; ecat4; 2412E2Rik; Homeobox protein NANOG; ES cell-associated protein 4; Early embryo specific expression NK-type homeobox protein; Homeobox transcription factor Nanog; Nanog

**Dilution**

<span class = "dilution\_WB">WB~1:100~1:500</span><br \><span class = "dilution\_IHC-P">IHC-P~1:100~1:500</span>

**Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

**Storage**

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

**Rabbit Anti-Nanog Polyclonal Antibody - 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:<a href="http://www.uniprot.org/citations/25825768" target="\_blank">25825768</a>). 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}

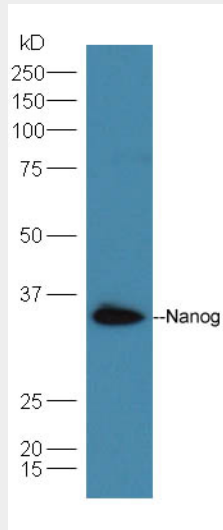
**Tissue Location**

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

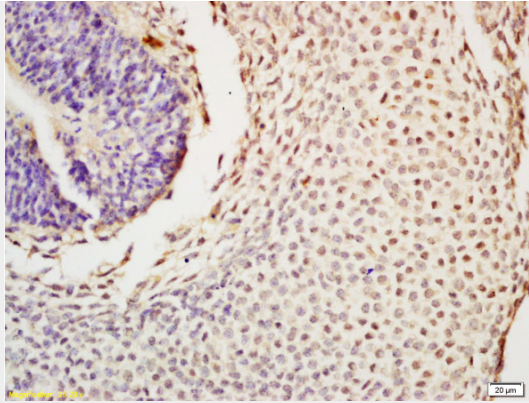
**Rabbit Anti-Nanog Polyclonal Antibody - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Rabbit Anti-Nanog Polyclonal Antibody - Images**

Lane 1: A549 cell lysates probed with Rabbit Anti-Nanog Polyclonal Antibody, Unconjugated (AP52287) at 1:300 overnight at 4°C. Followed by conjugation to secondary antibody at 1:5000 for 90 min at 37°C.



Formalin-fixed and paraffin embedded mouse tooth germ tissue labeled with Anti-Nanog Polyclonal Antibody (AP52287), Unconjugated at 1:200, followed by conjugation to the secondary antibody and DAB staining

#### **Rabbit Anti-Nanog Polyclonal Antibody - Background**

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'. 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.