

**AM11049SU-N****Monoclonal Antibody to NANOG - Purified**

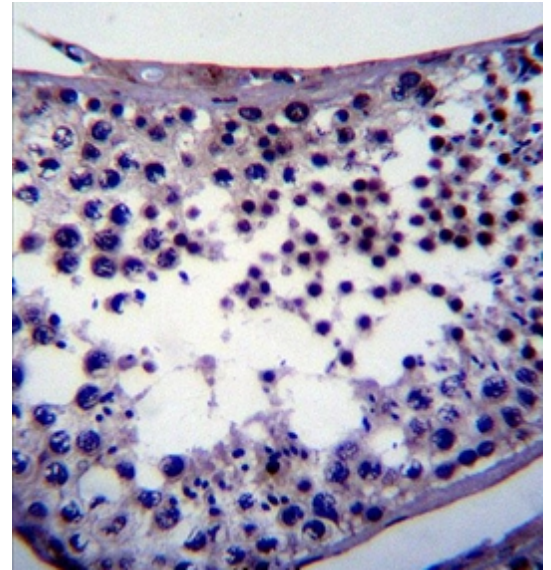
<b>Alternate names:</b>	Homeobox protein NANOG
<b>Quantity:</b>	0.4 ml
<b>Concentration:</b>	0.25 mg/ml (lot specific)
<b>Background:</b>	NANOG is a transcription regulator involved in inner cell mass and embryonic stem (ES) cell proliferation and self-renewal. It imposes pluripotency on ES cells and prevents their differentiation towards extraembryonic endoderm and trophoblast lineages. This protein 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. NANOG acts as a transcriptional activator or repressor. It binds optimally to the DNA consensus sequence 5'-[CG][GA][CG]C[GC]ATTAN[GC]-3'. When overexpressed, this protein promotes cells to enter into S phase and proliferation.
<b>Uniprot ID:</b>	<a href="#">Q9H9S0</a>
<b>NCBI:</b>	<a href="#">9606</a>
<b>GeneID:</b>	<a href="#">79923</a>
<b>Host / Isotype:</b>	Mouse / IgG1
<b>Recommended Isotype Controls:</b>	SM10P (for use in human samples), AM03095PU-N
<b>Clone:</b>	60CT70.5.12
<b>Immunogen:</b>	This antibody is generated from mouse immunized with Human recombinant NANOG protein.
<b>Format:</b>	<b>State:</b> Liquid purified Ig fraction <b>Purification:</b> Protein G Chromatography, eluted with high and low pH buffers and neutralized immediately, followed by dialysis against PBS <b>Buffer System:</b> PBS <b>Preservatives:</b> 0.09% (W/V) Sodium Azide
<b>Applications:</b>	<b>Peptide ELISA:</b> 1/1,000. <b>Western blot:</b> 1/100-1/250. <b>Immunohistochemistry:</b> 1/10-1/50. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Molecular Weight:</b>	34620 Da
<b>Specificity:</b>	This antibody is specific to Human NANOG.
<b>Species Reactivity:</b>	<b>Tested:</b> Human.
<b>Storage:</b>	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

**General Readings:**

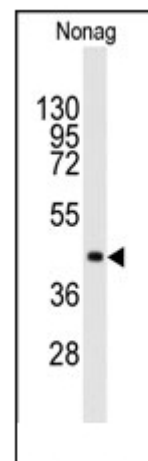
1. Kochupurakkal, B.S., Biochem. Biophys. Res. Commun. 365 (4), 846-850 (2008)
2. Freberg, C.T., Mol. Biol. Cell 18 (5), 1543-1553 (2007)

**Pictures:**

Immunohistochemistry analysis in formalin fixed and paraffin embedded human testis tissue using anti-NANOG monoclonal antibody Cat.-No AM11049SU-N followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of NANOG Antibody for immunohistochemistry. Clinical relevance has not been evaluated.



Western Blot analysis of anti-NANOG monoclonal antibody Cat.-No AM11049SU-N by NONAG recombinant protein. NANOG (NANOG + His tag) (arrow) was detected using the Mab.



Western blot analysis of anti-NANOG monoclonal antibody Cat.-No AM11049SU-N in K562 cell line lysates using (35ug/lane). This demonstrates the NANOG antibody detected the NANOG protein (arrow).

