

## Nanog Monoclonal Antibody

<b>Catalog No :</b>	YM0464
<b>Reactivity :</b>	Human
<b>Applications :</b>	WB;IF;ELISA
<b>Target :</b>	Nanog
<b>Fields :</b>	>>Signaling pathways regulating pluripotency of stem cells;>>Proteoglycans in cancer
<b>Gene Name :</b>	NANOG
<b>Protein Name :</b>	Homeobox protein NANOG
<b>Human Gene Id :</b>	79923
<b>Human Swiss Prot No :</b>	Q9H9S0
<b>Mouse Swiss Prot No :</b>	Q80Z64
<b>Immunogen :</b>	Purified recombinant fragment of Nanog (aa20-166) expressed in E. Coli.
<b>Specificity :</b>	Nanog Monoclonal Antibody detects endogenous levels of Nanog protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Monoclonal, Mouse
<b>Dilution :</b>	WB 1:500 - 1:2000. IF 1:200 - 1:1000. ELISA: 1:10000. Not yet tested in other applications.
<b>Purification :</b>	Affinity purification
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Molecularweight :</b>	35kD

**P References :**

1. Genes Cells. 2006 Sep;11(9):1115-23.
2. Mol Biol Cell. 2007 May;18(5):1543-53.

**Background :**

The protein encoded by this gene is a DNA binding homeobox transcription factor involved in embryonic stem (ES) cell proliferation, renewal, and pluripotency. The encoded protein can block ES cell differentiation and can also autorepress its own expression in differentiating cells. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2015],

**Function :**

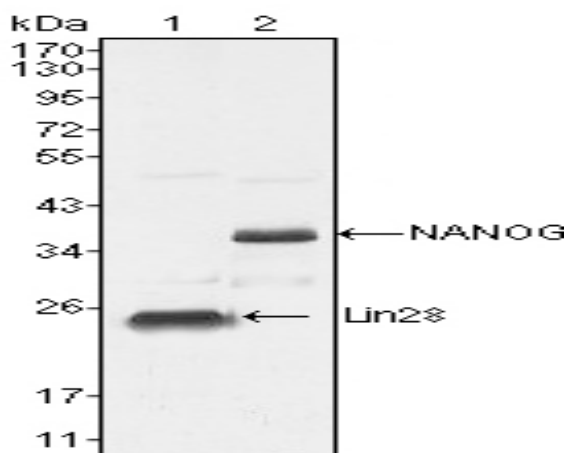
developmental stage:Expressed in embryonic stem (ES) and carcinoma (EC) cells. Expressed in inner cell mass (ICM) of the blastocyst and gonocytes between 14 and 19 weeks of gestation (at protein level). Not expressed in oocytes, unfertilized oocytes, 2-16 cell embryos and early morula (at protein level). Expressed in embryonic stem cells (ES). Expression decreases with ES differentiation.,function:May act as a transcription regulator (By similarity). When overexpressed, promotes cells to enter into S phase and proliferation.,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 trophoctoderm lineages. Blocks bone morphogenetic protein-induced mesoderm differentiation of ES cells by physically interacting with SMAD1 an

**Subcellular Location :**

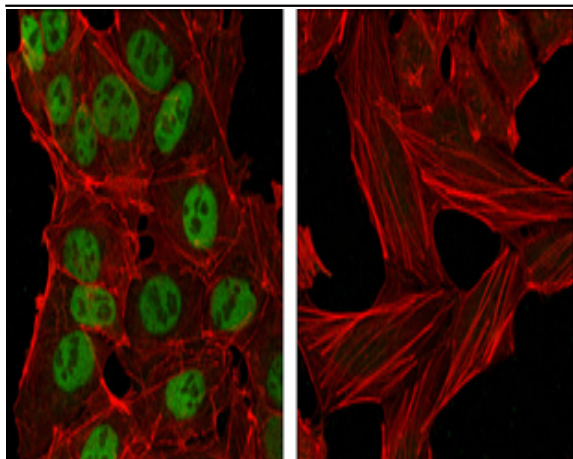
Nucleus .

**Expression :**

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.

**Products Images**

Western Blot analysis using Nanog Monoclonal Antibody against NTERA-2 cell lysate (2).



Confocal immunofluorescence analysis of NTERA-2 cells (left) and HeLa cells (right) using Nanog Monoclonal Antibody (green). Red: Actin filaments have been labeled with DY-554 phalloidin.