



Nanog Monoclonal Antibody

Catalog No	YP-Ab-15732
Isotype	IgG
Reactivity	Human
Applications	WB;IF;ELISA
Gene Name	NANOG
Protein Name	Homeobox protein NANOG
Immunogen	Purified recombinant fragment of Nanog (aa20-166) expressed in E. Coli.
Specificity	Nanog Monoclonal Antibody detects endogenous levels of Nanog protein.
Formulation	Ascitic fluid containing 0.03% sodium azide,0.5% BSA, 50%glycerol.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	Western Blot: 1/500 - 1/2000. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	NANOG; Homeobox protein NANOG; Homeobox transcription factor Nanog; hNanog
Observed Band	35-42kD
Calculated Molecular Weight	35kD
Cell Pathway	Nucleus .
Tissue Specificity	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.
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 trophectoderm lineages. Blocks bone morphogenetic protein-induced mesoderm



differentiation of ES cells by physically interacting with SMAD1 and

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].

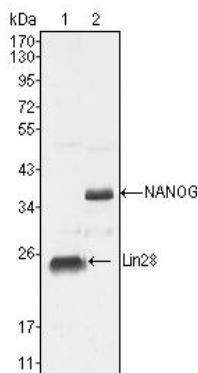
matters needing attention

Avoid repeated freezing and thawing!

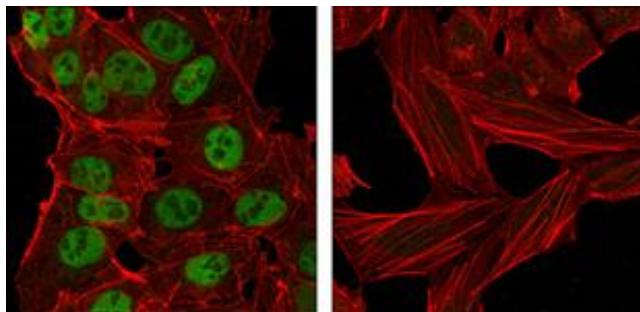
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

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.