

# Nanog, Rabbit pAb

**CATALOG #:** 3165-100

**AMOUNT:** 100 μg

HOST (ISOTYPE): Rabbit (Ig)

**IMMUNOGEN:** This antibody is generated from rabbits immunized with

recombinant human Nanog.

SPECIES REACTIVITY: Human

FORMULATION:

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

STORAGE CONDITIONS:

Maintain refrigerated at 2-8°C for up to 6 months or -20°C for long term storage.

#### BACKGROUND DESCRIPTION:

NANOG is a transcription regulator involved with inner cell mass and embryonic stem (ES) cell proliferation and self-renewal. It imposes pluripotency on ES cells and prevents their differentiation towards extra-embryonic endoderm and trophectoderm 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 by optimally binding 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.

## **BACKGROUND REFERENCES:**

- 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)

### OTHER NAMES:

Homeobox transcription factor Nanog; Homeobox protein NANOG; hNanog.

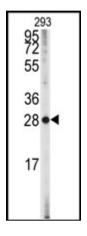
## SPECIFICITY:

The antibody detects a  $\sim$  34 kDa band, corresponding to the expected molecular mass of Nanog on immunoblots.

FOR RESEARCH USE ONLY! Not to be used on humans.

#### APPLICATION:

The antibody can be used for ELISA (0.25  $\mu$ g/ml), Western blotting (2.5 – 5  $\mu$ g/ml).



Western blot analysis of anti-Nanog Antibody (Cat.#3165-100) in 293 cell line lysates (35ug/lane). Nanog (arrow) was detected using the purified pAb.

## **RELATED PRODUCTS:**

Apoptosis Detection Kits & Reagents

- Annexin V Kits & Bulk Reagents
- Caspase Assay Kits & Reagents
- Mitochondrial Apoptosis Kits & Reagents
- Nuclear Apoptosis Kits & Reagents
- Apoptosis Inducers and Set
- Apoptosis siRNA Vectors

## Cell Fractionation System

- Mitochondria/Cytosol Fractionation Kit
- Nuclear/Cytosol Fractionation Kit
- Membrane Protein Extraction Kit
- Cytosol/Particulate Rapid Separation Kit
- Mammalian Cell Extraction Kit
- FractionPREP Fractionation System

