

For Research Use Only

# NANOG Polyclonal antibody

Catalog Number: 14295-1-AP

Featured Product

104 Publications



## Basic Information

**Catalog Number:**

14295-1-AP

**Size:**

150ul, Concentration: 750 µg/ml by Nanodrop and 280 µg/ml by Bradford method using BSA as the standard;

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG5645

**GenBank Accession Number:**

BC160187

**GeneID (NCBI):**

79923

**Full Name:**

Nanog homeobox

**Calculated MW:**

35 kDa

**Observed MW:**

43-48 kDa

**Purification Method:**

Antigen affinity purification

**Recommended Dilutions:**

WB 1:500-1:1000

IF 1:20-1:200

## Applications

**Tested Applications:**

FC, IF, WB, ELISA

**Cited Applications:**

IF, IHC, WB

**Species Specificity:**

human, mouse, rat

**Cited Species:**

human, marmoset, mouse, rat

**Positive Controls:**

WB : mouse brain tissue, human brain tissue, rat brain tissue

IF : human embryonic stem cells,

## Background Information

Nanog is a member of the homeobox family of DNA binding transcription factors and has been shown to maintain embryonic stem (ES) cell self-renewal independently of leukemia inhibitory factor (LIF)/Stat3. Nanog mRNA is present in pluripotent mouse and human cell lines, and absent from differentiated cells. Functionally, Nanog works together with other key pluripotent factors (Oct4, Sox2, and Lin28) to reprogram human fibroblasts and generate induced pluripotent stem (iPS) cells. These key factors form a regulatory network to support or limit each other's expression level, which maintains the properties of ES cells. Affinity purified rabbit anti-Nanog can be used to demonstrate pluripotency of ES and IPS cells. There are two kinds of variants could be recognized by NANOG, one is normal form (~39kd), the other is post-translation modified form (~48kd) (21136380). Nanog exists two isoforms with molecular weight 34.4 kDa and 31.9 kDa. (PMID: 21969378)

## Notable Publications

Author	Pubmed ID	Journal	Application
Chenlong Li	31558707	Cell Death Dis	WB
XiaoLin Sun	32963547	Stem Cells Int	IF
Yang Liu	30221711	Mol Med Rep	WB

## Storage

**Storage:**

Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

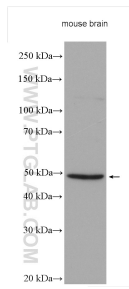
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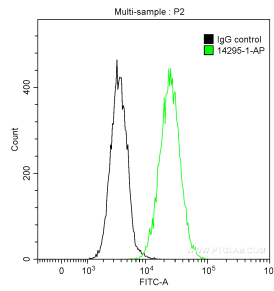
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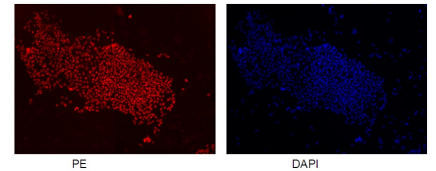
## Selected Validation Data



mouse brain tissue were subjected to SDS PAGE followed by western blot with 14295-1-AP (NANOG antibody) at dilution of 1:800 incubated at room temperature for 1.5 hours.



$1 \times 10^6$  NCCIT cells were intracellularly stained with 0.2  $\mu$ g Anti-Human NANOG (14295-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (green), and 0.2  $\mu$ g Control Antibody. Cells were fixed with 90% MeOH.



Confocal immunofluorescent analysis of human embryonic stem cells with 14295-1-AP at dilution of 1:200. The PE shows staining with 14295-1-AP/PE. The DAPI shows nuclear staining by DAPI.

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