

For Research Use Only

Nanog Polyclonal antibody

Catalog Number: 14295-1-AP

Featured Product

273 Publications



Basic Information

Catalog Number:

14295-1-AP

Size:

150ul, Concentration: 750 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG5645

GenBank Accession Number:

BC160187

GeneID (NCBI):

79923

UNIPROT ID:

Q9H9S0

Full Name:

Nanog homeobox

Calculated MW:

35 kDa

Observed MW:

35-40 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB: 1:500-1:3000

IF/ICC: 1:20-1:200

FC (Intra): 0.40 ug per 10⁶ cells in a 100 µl suspension

Applications

Tested Applications:

WB, IF/ICC, FC (Intra), ELISA

Cited Applications:

WB, IHC, IF

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat, pig, marmoset

Positive Controls:

WB : NCCIT cells, rat brain tissue, mouse brain tissue, mouse embryo tissue

IF/ICC : human embryonic stem cells,

FC (Intra) : NCCIT 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 that can be recognized by NANOG, one is a normal form (~39 kDa), the other is a post-translation modified form (~48 kDa) (21136380). Nanog has two isoforms with molecular weights of 34.4 kDa and 31.9 kDa. (PMID: 21969378)

Notable Publications

Author	Pubmed ID	Journal	Application
Ana Kojic	36194907	Stem Cell Res	IF
Chenlong Li	31558707	Cell Death Dis	WB
Chaoqun Liu	34551797	J Exp Clin Cancer Res	WB

Storage

Storage:

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

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

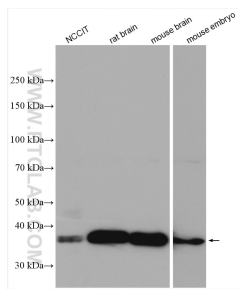
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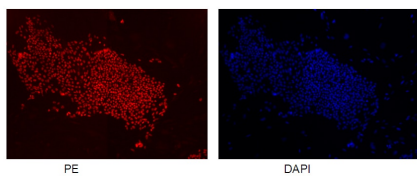
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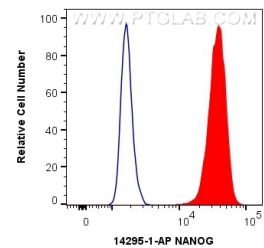
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 14295-1-AP (Nanog antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



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.



1X10⁶ NCCIT cells were intracellularly stained with 0.4 ug Anti-Human Nanog (14295-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Isotype Control. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).