For Research Use Only

Nanog Polyclonal antibody

Catalog Number: 14295-1-AP

Featured Product

280 Publications



Basic Information

Catalog Number: GenBank Accession Number: 14295-1-AP BC160187 GeneID (NCBI): Concentration: 750 ug/ml 79923 **UNIPROT ID:** Source: Rabbit Q9H9S0 Full Name: Isotype: Nanog homeobox Calculated MW: Immunogen Catalog Number:

35 kDa
Observed MW:
35-40 kDa

Tested Applications:

AG5645

WB, IF/ICC, FC (Intra), ELISA Cited Applications: WB, IHC, IF

Species Specificity: human, mouse, rat Cited Species:

human, mouse, rat, pig, marmoset

Purification Method:

Antigen affinity purification Recommended Dilutions:

FC (Intra): 0.40 ug per 10^6 cells in a

100 µl suspension

WB: 1:5000-1:50000 IF/ICC: 1:20-1:200

Applications

Positive Controls:

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

mouse embryo tissue

IF/ICC: human embronic 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:

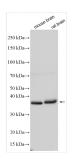
Store at -20°C. Stable for one year after shipment.

Storage Buffer

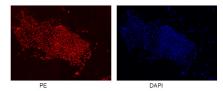
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

Selected Validation Data

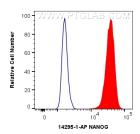


Various lysates were subjected to SDS PAGE followed by western blot with 14295-1-AP (Nanog antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Confocal immunofluorescent analysis of human embronic 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.

Confocal immunofluorescent analysis of human embronic 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.



1X10^6 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).