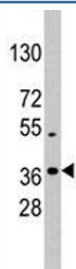


## NANOG Antibody (N-Terminal Region) (F44247)

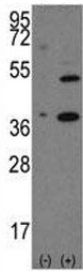
| Catalog No.   | Formulation                                | Size    |
|---------------|--------------------------------------------|---------|
| F44247-0.4ML  | In 1X PBS, pH 7.4, with 0.09% sodium azide | 0.4 ml  |
| F44247-0.08ML | In 1X PBS, pH 7.4, with 0.09% sodium azide | 0.08 ml |

[Bulk quote request](#)

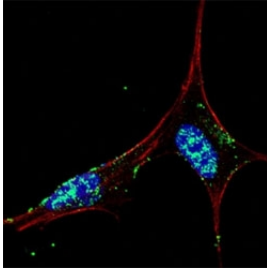
|                             |                                                                                                                     |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------|
| <b>Availability</b>         | 1-3 business days                                                                                                   |
| <b>Species Reactivity</b>   | Human                                                                                                               |
| <b>Predicted Reactivity</b> | Primate                                                                                                             |
| <b>Format</b>               | Purified                                                                                                            |
| <b>Clonality</b>            | Polyclonal (rabbit origin)                                                                                          |
| <b>Isotype</b>              | Rabbit Ig                                                                                                           |
| <b>Purity</b>               | Purified                                                                                                            |
| <b>UniProt</b>              | Q9H9S0                                                                                                              |
| <b>Applications</b>         | Western Blot : 1:1000<br>IHC (Paraffin) : 1:10-1:50<br>Flow Cytometry : 1:10-1:50<br>Immunofluorescence : 1:10-1:50 |
| <b>Limitations</b>          | This NANOG antibody is available for research use only.                                                             |



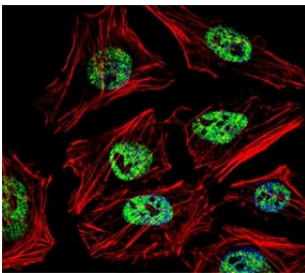
Western blot analysis of NANOG antibody and K562 lysate; Predicted molecular weight: 35-45 kDa.



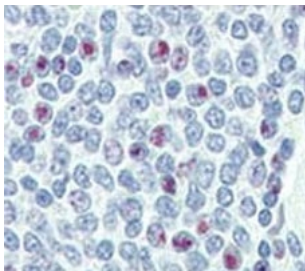
Western blot analysis of NANOG antibody and 293 cell lysate (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the human gene (2). Predicted molecular weight: 35-45 kDa.



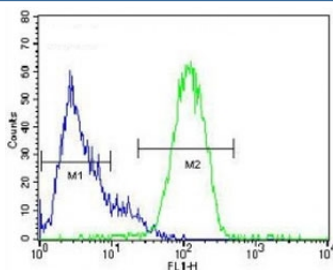
Fluorescent confocal image of SY5Y cells stained with NANOG antibody at 1:50. Immunoreactivity is localized mainly to the nuclei of the cells.



Fluorescent confocal image of HeLa cells stained with NANOG antibody at 1:25. Immunoreactivity is localized to the nucleus.



IHC analysis of FFPE human spleen tissue stained with NANOG antibody



NANOG antibody flow cytometric analysis of HepG2 cells (right histogram) compared to a negative control (left histogram). FITC-conjugated goat-anti-rabbit secondary Ab was used for the analysis.

## Description

NANOG is a transcription regulator involved in inner cell mass and embryonic stem (ES) cell proliferation and self-renewal. It imposes pluripotency on ES cells and prevents their differentiation towards extraembryonic endoderm and trophoblast 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. It binds optimally 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. [UniProt]

## Application Notes

Titration of the NANOG antibody may be required due to differences in protocols and secondary/substrate sensitivity.

## Immunogen

A portion of amino acids 15-49 from the human protein was used as the immunogen for this NANOG antibody.

## Storage

Aliquot the NANOG antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.