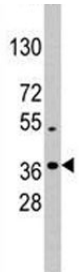
NANOG Antibody (N-Terminal Region) (F44247)

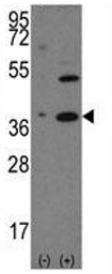
Catalog No.	Formulation	Size
F44247-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F44247-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

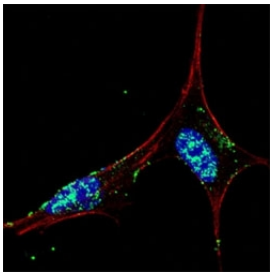
Availability	1-3 business days
Species Reactivity	Human
Predicted Reactivity	Primate
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Purified
UniProt	Q9H9S0
Applications	Western Blot : 1:1000 IHC (Paraffin) : 1:10-1:50 Flow Cytometry : 1:10-1:50 Immunofluorescence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



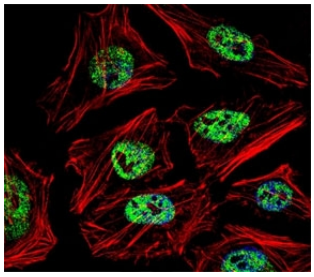
Western blot analysis of NANOG antibody and K562 lysate; Predicted molecular weight: 35-45 kDa.



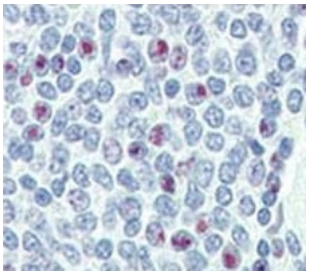
Western blot analysis of NANOG antibody and 293 cell lysate (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the human gene (2). Predicted molecular weight: 35-45 kDa.



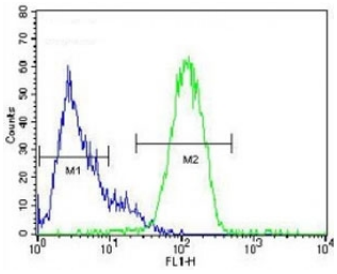
Fluorescent confocal image of SY5Y cells stained with NANOG antibody at 1:50. Immunoreactivity is localized mainly to the nuclei of the cells.



Fluorescent confocal image of HeLa cell 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 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. 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.