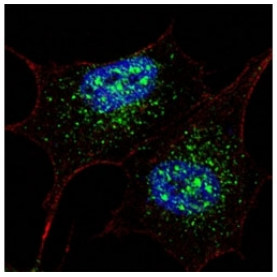
NANOG Antibody (F44249)

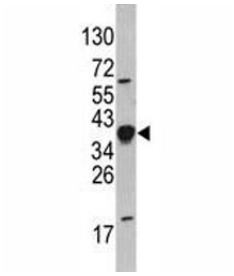
Catalog No.	Formulation	Size
F44249-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F44249-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

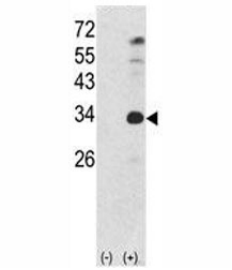
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	Q9H9S0
Applications	Western Blot : 1:1000 Immunofluorescence : 1:10-1:50
Limitations	This NANOG antibody is available for research use only.



Fluorescent confocal image of SY5Y cells stained with NANOG antibody at 1:200. NANOG immunoreactivity is localized mainly to the nuclei and also to the cytoplasm.



Western blot analysis of NANOG antibody and HepG2 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.

Description

NANOG is a Ttranscription regulator involved in inner cell mass and embryonic stem (ES) cels 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.

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 267-292 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.