

Human Nanog antibody

Catalog Number: ANA0837

PRODUCT INFORMATION

Catalog number

ANA0837

Clone No.

5A10

Product type

Monoclonal Antibody

UnitProt No.

Q9H9S0

NCBI Accession No.

NP_079141

Alternative Names

Nanog homeobox, hNanog, Homeobox protein NANOG, Homeobox transcription factor Nanog

PRODUCT SPECIFICATION

Antibody Host

Mouse

Reacts With

Human

Concentration

1mg/ml (determined by BCA assay)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% glycerol

Immunogen

Recombinant human Nanog (1-154aa) purified from E. coli

Isotype

IgG2a kappa

Purification Note

By protein-G affinity chromatography

Application

ELISA, WB, IHC, FACS

Usage

The antibody has been tested by ELISA, Western blot, FACS and IHC analysis to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results.

Storage

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Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

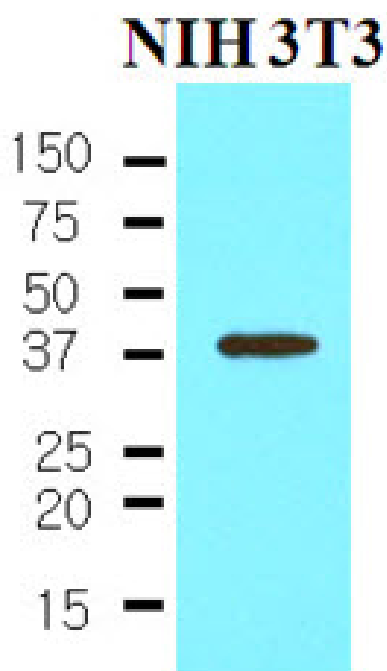
Nanog is a multidomain homeobox transcription factor that functions to maintain the undifferentiated state of pluripotent stem cells. Nanog expression counteracts the differentiation-promoting signals induced by the extrinsic factors LIF, Stat3 and BMP. When Nanog expression is downregulated, cell differentiation can proceed. Proteins that regulate Nanog expression include transcription factors Oct4, SOX2, FoxD3, and Tcf3 and tumor suppressor p53.

General References

Tay Y., et al. (2008) Nature. 455(7216):1124-8
 Chiou SH., et al. (2008) Clin Cancer Res. 14(13):4085-95
 Boer B., et al. (2008) Mol Reprod Dev.

DATA

Western blot analysis (WB)

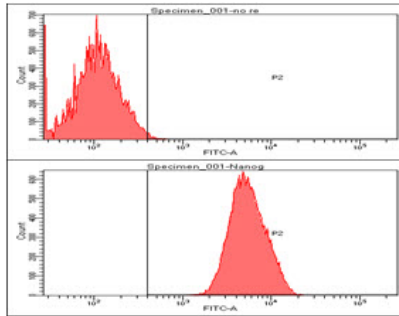


The cell lysate of NIH3T3 (35ug) was resolved by SDS-PAGE, transferred to NC membrane and probed with anti-human Nanog (1:500). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

Flow cytometry (FACS)

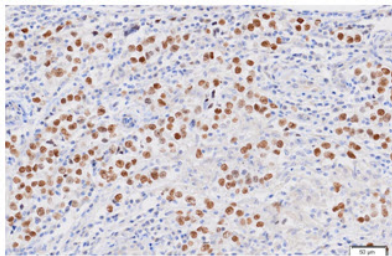
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Flow cytometry analysis of Nanog in Hep3B cell line, staining at 2-5ug for 1×10^6 cells. The secondary antibody used goat anti-mouse IgG Alexa fluor 488 conjugate.

Immunohistochemistry (IHC)



Human seminoma tissue

Paraffin embedded sections of human seminoma tissue were incubated with anti-human Nanog (1:50) for 2 hours at room temperature. Antigen retrieval was performed in 0.1M sodium citrate buffer and detected using Diaminobenzidine (DAB)