**BACKGROUND**

Nanog (from "Tir Na Nog", the mythologic celtic land of the ever young) is a divergent homeodomain protein that directs pluripotency and differentiation of undifferentiated embryonic stem cells. Nanog mRNA is present in pluripotent mouse and human cell lines and absent from differentiated cells. Human Nanog protein shares 52% overall amino acid identity with the mouse protein and 85% identity in the homeodomain. Human Nanog maps to gene locus 12p13.31, whereas mouse Nanog maps to gene locus 6 F2. Murine embryonic Nanog expression is detected in the inner cell mass of the blastocyst. High levels of human Nanog expression have been detected by Northern analysis in the undifferentiated NTERA-2 cl.D1 embryonal carcinoma cell line.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: NANOG (human) mapping to 12p13.31; Nanog (mouse) mapping to 6 F2.

**SOURCE**

Nanog (SA10) is a mouse monoclonal antibody raised against amino acids 1-154 corresponding to recombinant Nanog of human origin.

**PRODUCT**

Each vial contains 50 µg IgG2a in 500 µl of PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

Nanog (SA10) is recommended for detection of Nanog of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Nanog siRNA (h): sc-43958, Nanog siRNA (m): sc-44833, Nanog shRNA Plasmid (h): sc-43958-SH, Nanog shRNA Plasmid (m): sc-44833-SH, Nanog shRNA (h) Lentiviral Particles: sc-43958-V and Nanog shRNA (m) Lentiviral Particles: sc-44833-V.

Molecular Weight of Nanog: 40 kDa.

Positive Controls: Raji whole cell lysate: sc-364236, HeLa whole cell lysate: sc-2200 or Nanog (h): 293 Lysate: sc-171225.

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**DATA**

Nanog (SA10) sc-134218. Western blot analysis of Nanog expression in HeLa (A) and Raji (B) whole cell lysates and human ovary tissue extract (C).

Nanog (5A10): sc-134218. Western blot analysis of Nanog expression in non transfected 293: sc-110760 (A), human Nanog transfected 293: sc-171225 (B) and HeLa (C) whole cell lysates.

**SELECT PRODUCT CITATIONS**


See Nanog (1E6C4): sc-293121 for Nanog antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor®, 488 and Alexa Fluor® 647.