Nanog (H-2): sc-374103

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 loci 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.

CHROMOSOMAL LOCATION

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

SOURCE

Nanog (H-2) is a mouse monoclonal antibody raised against amino acids 151-305 mapping at the C-terminus of Nanog of human origin.

PRODUCT

Each vial contains 200 µg IgGκ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Nanog (H-2) is available conjugated to agarose (sc-374103 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-374103 HRP), 200 µg/ml, for WB, IHC and ELISA; to either phycocerythrin (sc-374103 PE), fluorescein (sc-374103 FITC), Alexa Fluor® 488 (sc-374103 AF488), Alexa Fluor® 546 (sc-374103 AF546), Alexa Fluor® 594 (sc-374103 AF594) or Alexa Fluor® 647 (sc-374103 AF647), 200 µg/ml, for WB (RGB), IF, IHC and FCM; and to either Alexa Fluor® 680 (sc-374103 AF680) or Alexa Fluor® 790 (sc-374103 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

STORAGE

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

APPLICATIONS

Nanog (H-2) is recommended for detection of Nanog of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation (1-2 µg per 100-500 µg of total protein (1 ml of cell lysate), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) 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: Nanog (h): 293 Lysate: sc-171225, Nanog (h): 293T Lysate: sc-369869 or HeLa nuclear extract: sc-2120.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:


DATA

![Western Blot Analysis](image)

SELECT PRODUCT CITATIONS


RESEARCH USE

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

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