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 aminos 151-305 mapping at the C-terminus of Nanog of human origin.

**PRODUCT**

Each vial contains 200 µg IgG₂κ 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), 150 µg/µl agarose in 1 ml, for IP; to HRP (sc-374103 HRP), 500 µg/ml, for WB, HCP and ELISA; to either phycoerythrin (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 (R (G), IF, HCP 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.

**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).


Molecular Weight of Nanog: 40 KDa.

Positive Controls: Nanog (h): 293 Lysate: sc-171225 or HeLa nuclear extract: sc-2120.

**STORAGE**

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

**RESEARCH USE**

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

**DATA**

![Western blot analysis of Nanog expression in non-transfected](image)

![Western blot analysis of Nanog expression in transfected](image)

**SELECT PRODUCT CITATIONS**


**PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.

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