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Schillerstr. 5

AM09023PU-S Monoclonal Antibody to NANOG (1-154) - Purified

Alternate names: Homeobox protein NANOG

Quantity: 50 μl

Concentration: 1.0 mg/ml

Background: 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.

Uniprot ID: Q9H9S0

NCBI: NP 079141.2

GenelD: <u>79923</u>

Host / Isotype: Mouse / IgG2a Recommended Isotype AM03096PU-N

Controls:

Clone: 5A10

Immunogen: Recombinant Human Nanog (1-154 aa) purified from E. coli

Format: State: Liquid purified lg fraction

Purification: Protein-G affinity chromatography

Buffer System: PBS, pH 7.4 containing 0.02% Sodium Azide and 10% Glycerol

Applications: ELISA.

Western blot (1/500-1/2,000).

Flow Cytometry.

Immunohistochemistry on Paraffin Sections (1/50-1/100).

Other applications not tested. Optimal dilutions are dependent on conditions and

should be determined by the user.

Specificity: The antibody recognizes NANOG.

Species: Human, Mouse. Other species not tested.

Storage: Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing. Shelf life: one year from despatch.

General Readings: 1. Tay Y., et al. (2008) Nature. 455(7216):1124-8.

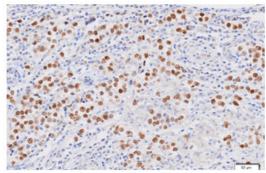
2. Chiou SH., et al. (2008) Clin Cancer Res. 14(13):4085-95.

3. Boer B., et al. (2008) Mol Reprod Dev.



Pictures:

Immunohistochemistry: Paraffin Embedded Sections of Human seminoma tissue were incubated with anti-Human Nanog (1/50) for 2 hours at RT. Antigen retrieval was performed in 0.1M sodium citrate buffer and detected using Diaminobenzidine (DAB).



Human seminoma tissue

Western blot analysis: The cell lysates of NIH3T3 (35 ug) were 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.

