

Anti-Nanog [Nanog]

Catalogue number: 151719

Sub-type: Primary antibody

Images:

Contributor

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Institute: Cancer Research UK, London Research Institute: Lincoln's Inn Fields

Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: Anti-Nanog [Nanog]

Alternate name:

Class: Polyclonal

Conjugate: Unconjugated

Description: Nanog is a transcription factor critically involved with self-renewal of undifferentiated embryonic stem cells. Human NANOG protein is a 305 amino acid protein with a conserved homeodomain motif that is localized to the nuclear component of cells. The homeodomain region facilitates DNA binding. Overexpression of Nanog in mouse embryonic stem cells causes them to self-renew in the absence of Leukemia inhibitory factor. In the absence of Nanog, mouse embryonic stem cells differentiate into visceral/parietal endoderm. Loss of Nanog function causes differentiation of mouse embryonic stem cells into other cell types. NANOG overexpression in human embryonic stem cells enables their propagation for multiple passages during which the cells remain pluripotent. Gene knockdown of Nanog promotes differentiation, thereby demonstrating a role for these factors in human embryonic stem cell self-renewal.

Purpose:

Parental cell:

Organism:

Tissue:

Model:

Gender:

Isotype:

Reactivity: Human

Selectivity:

Host: Rabbit

Immunogen: Purified GST-Nanog 1-95 fusion protein

Immunogen UNIPROT ID:

Sequence:

Growth properties:

Production details:

Formulation:

Recommended controls:

Bacterial resistance:

Selectable markers:

Additional notes:

Target details

Target: Nanog

Target alternate names:

Target background: Nanog is a transcription factor critically involved with self-renewal of undifferentiated embryonic stem cells. Human NANOG protein is a 305 amino acid protein with a conserved homeodomain motif that is localized to the nuclear component of cells. The homeodomain region facilitates DNA binding. Overexpression of Nanog in mouse embryonic stem cells causes them to self-renew in the absence of Leukemia inhibitory factor. In the absence of Nanog, mouse embryonic stem cells differentiate into visceral/parietal endoderm. Loss of Nanog function causes differentiation of mouse embryonic stem cells into other cell types. NANOG overexpression in human embryonic stem cells enables their propagation for multiple passages during which the cells remain pluripotent. Gene knockdown of Nanog promotes differentiation, thereby demonstrating a role for these factors in human embryonic stem cell self-renewal.

Molecular weight:

Ic50:

Applications

Application: ChIP ; FACS ; IF ; IP ; WB

Application notes:

Handling

Format: Liquid

Concentration: 1.5 mg/ml

Passage number:

Growth medium:

Temperature:

Atmosphere:

Volume:

Storage medium:

Storage buffer: Whole serum

Storage conditions: -15° C to -25° C

Shipping conditions: Shipping at 4° C

Related tools

Related tools:

References

References: Bianchi et al. 2015. PLoS One. 10(4):e0122976. PMID: 25849579. ; Martinez-Corral et al. 2015. Circ Res. 116(10):1649-54. PMID: 25737499. ; Rouhani et al. 2015. Nat Commun. 6:6771. PMID: 25857745. ; Roles of lymphatic endothelial cells expressing peripheral tissue antigens in CD4 T-cell tolerance induction. ; A transgenic Prox1-Cre-tdTomato reporter mouse for lymphatic vessel research. ; Nonvenous origin of dermal lymphatic vasculature. ; Park et al. 2014. J Clin Invest. 124(9):3960-74. PMID: 25061877. ; Aspelund et al. 2014. J Clin Invest. 124(9):3975-86. PMID: 25061878. ; The Schlemm's canal is a VEGF-C/VEGFR-3-responsive lymphatic-like vessel. ; Lymphatic regulator PROX1 determines Schlemm's canal integrity and identity. ; Tatin et al. 2013. Dev Cell. 26(1):31-44. PMID: 23792146. ; Planar cell polarity protein Celsr1 regulates endothelial adherens junctions and directed cell rearrangements during valve morphogenesis. ; Chen et al. 2012. J Clin Invest. 122(6):2006-17. PMID: 22622036. ; Blood flow reprograms lymphatic vessels to blood vessels. ; Sabine et al. 2012. Dev Cell. 22(2):430-45. PMID: 22306086. ; Mechanotransduction, PROX1, and FOXC2 cooperate to control connexin37 and calcineurin during lymphatic-valve formation. ; Bazigou et al. 2011. J Clin Invest. 121(8):2984-92. PMID: 21765212. ; Genes regulating lymphangiogenesis control venous valve formation and maintenance in mice.