ARG56959
anti-NANOG antibody [5A10]

Package: 50 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [5A10] recognizes NANOG
Tested Reactivity	Hu, Ms
Tested Application	FACS, IHC-P, WB
Host	Mouse
Clonality	Monoclonal
Clone	5A10
Isotype	IgG2a, kappa
Target Name	NANOG
Species	Human
Immunogen	Recombinant fragment around aa. 1-154 of Human Nanog.
Conjugation	Un-conjugated
Alternate Names	Homeobox transcription factor Nanog; Homeobox protein NANOG; hNanog

Application Instructions

Application table

Application	Dilution
FACS	Assay-dependent
IHC-P	1:50
WB	1:500 - 1:1000

Application Note: IHC-P: Antigen Retrieval: Boil tissue section in 0.1M Sodium citrate buffer (pH 6.0) for 20 min.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

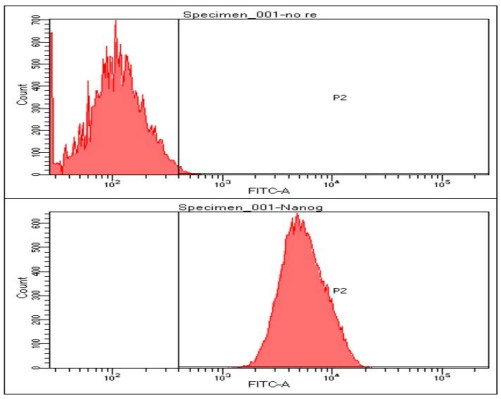
Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS (pH 7.4), 0.02% Sodium azide and 10% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	10% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

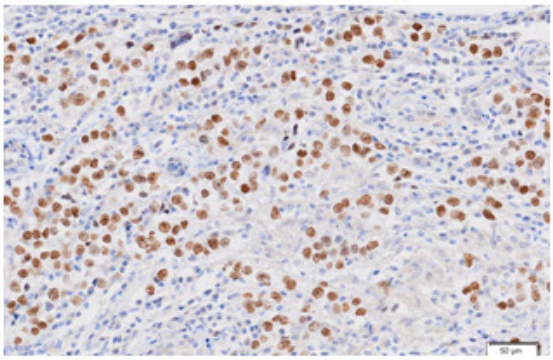
Database links	GeneID: 71950 Mouse GeneID: 79923 Human Swiss-port # Q80Z64 Mouse Swiss-port # Q9H9S0 Human
Gene Symbol	NANOG
Gene Full Name	Nanog homeobox
Background	The protein encoded by this gene is a DNA binding homeobox transcription factor involved in embryonic stem (ES) cell proliferation, renewal, and pluripotency. The encoded protein can block ES cell differentiation and can also autorepress its own expression in differentiating cells. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2015]
Function	Transcription regulator involved in inner cell mass and embryonic stem (ES) cells proliferation and self-renewal. Imposes pluripotency on ES cells and prevents their differentiation towards extraembryonic endoderm and trophectoderm lineages. Blocks bone morphogenetic protein-induced mesoderm differentiation of ES cells by physically interacting with SMAD1 and interfering with the recruitment of coactivators to the active SMAD transcriptional complexes. Acts as a transcriptional activator or repressor. Binds optimally to the DNA consensus sequence 5'-TAAT[GT][GT]-3' or 5'-[CG][GA][CG]C[GC]ATTAN[GC]-3'. Able to autorepress its expression in differentiating (ES) cells: binds to its own promoter following interaction with ZNF281/ZFP281, leading to recruitment of the NuRD complex and subsequent repression of expression. When overexpressed, promotes cells to enter into S phase and proliferation. [UniProt]
Calculated Mw	35 kDa

Images



ARG56959 anti-NANOG antibody [5A10] FACS image

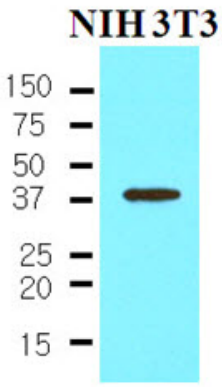
Flow Cytometry: Hep3B cell line stained with ARG56959 anti-NANOG antibody [5A10] at 2-5 µg for 1x10^6 cells. Secondary antibody: Goat anti-Mouse IgG Alexa fluor 488 conjugate.



Human seminoma tissue

ARG56959 anti-NANOG antibody [5A10] IHC-P image

Immunohistochemistry: Paraffin embedded sections of Human seminoma tissue stained with ARG56959 anti-NANOG antibody [5A10] at 1:50 for 2 hours at RT. Antigen Retrieval: Boil tissue section in 0.1M Sodium citrate buffer (pH 6.0) for 20 min.



ARG56959 anti-NANOG antibody [5A10] WB image

Western blot: 35 µg of NIH3T3 cell lysate stained with ARG56959 anti-NANOG antibody [5A10] at 1:500.