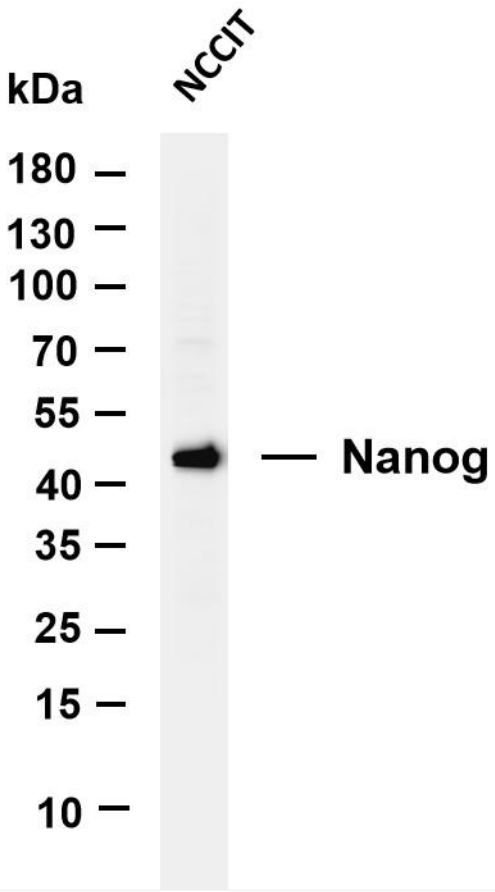
Nanog Rabbit mAb

Catalog No	YP-rAb-18058
Isotype	IgG
Reactivity	Human
Applications	WB,IHC,IF,ELISA
Gene Name	NANOG
Protein Name	Homeobox protein NANOG
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:200-1000; WB 1:1000-5000; IF 1:200-1000; ELISA 1:5000-20000; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15° C to -25° C/1 year(Do not lower than -25° C)
Synonyms	NANOG ; Homeobox protein NANOG ; Homeobox transcription factor Nanog ; hNanog
Observed Band	42kD
Calculated Molecular Weight	34kD
Cell Pathway	Nucleus
Tissue Specificity	Expressed in testicular carcinoma and derived germ cell tumors (at protein level). Expressed in fetal gonads, ovary and testis. Also expressed in ovary teratocarcinoma cell line and testicular embryonic carcinoma. Not expressed in many somatic organs and oocytes.
Function	developmental stage:Expressed in embryonic stem (ES) and carcinoma (EC) cells. Expressed in inner cell mass (ICM) of the blastocyst and gonocytes between 14 and 19 weeks of gestation (at protein level). Not expressed in oocytes, unfertilized oocytes, 2-16 cell embryos and early morula (at protein level). Expressed in embryonic stem cells (ES). Expression decreases with ES differentiation.,Function:May act as a transcription regulator (By similarity). When overexpressed, promotes cells to enter into S phase and proliferation.,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 (By similarity). Acts as a transcriptional activator or repressor (By similarity). Binds optimally to the DNA consensus sequence 5'-TAAT[GT][GT]-3' or 5'-[CG][GA][CG]C[GC]ATTAN[GC]-3' (By similarity). When overexpressed, promotes cells to enter into S phase and proliferation.,miscellaneous:Almost identical to NANOG. There are only one change in the inferred amino acid sequence from 'Gln-253' in NANOG to His-253 in NANOGP8.,miscellaneous:Exists an other tandem duplicated non-processed pseudogene (NANOGP1) and 10 other NANOG-related nucleotide sequences located on different chromosomes, all of which are processed pseudogenes lacking introns (NANOGP2 to NANOGP11); except NANOGP8 which is a retrogene.,online information:Nanog entry,similarity:Belongs to the Nanog homeobox family.,similarity:Contains 1 homeobox DNA-binding domain.,subunit:Interacts with SMAD1 and SALL4.,tissue specificity:Expressed in osteosarcoma cancer cell line (at protein level) (Probable). Expressed in tumor uterine cervix, breast and urinary bladder tissues, and also osteosarcoma, hepatoma, and breast adenocarcinoma cancer cell lines.,tissue specificity:Expressed in testicular carcinoma and derived germ cell tumors (at protein level). Expressed in fetal gonads, ovary and testis. Also expressed in ovary teratocarcinoma cell line and testicular embryonic carcinoma. Not expressed in many somatic organs and oocytes.,
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],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Nanog antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: NCCIT Predicted band size: 42kDa Observed band size: 42kDa