

## NANOG Antibody (Center)

Catalog\_no: AB3302

Reactivity: H

Category: 抗原抗体

Size:  $100\mu L/50\mu L$ 

Immunogen: HUMAN

Specificity: This NANOG antibody is generated from a rabbit immunized with a KLH conjugated

synthetic peptide between 155-189 amino acids from the Central region of human

NANOG.

Dilution: WB,1:2000;WB,1:2000;

Other\_name: Homeobox protein NANOG, Homeobox transcription factor Nanog, hNanog, NANOG

Isotype: Rabbit Ig

Background: 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.

reference: Mitsui K.,et al.Cell 113:631-642(2003). Clark A.T.,et al.Stem Cells 22:169-179(2004). Kim

J.S., et al. Exp. Mol. Med. 37:601-607(2005). Ota T., et al. Nat. Genet. 36:40-45(2004). Mural

R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.