

Nanog Antibody

✓ 100 µl
(10 Western mini-blot)

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New 02/09

This product is for *in vitro* research use only and is not intended for use in humans or animals.
This product is not intended for use as a therapeutic or in diagnostic procedures.

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W, IF-IC, F Endogenous	H	42 kDa	Rabbit**

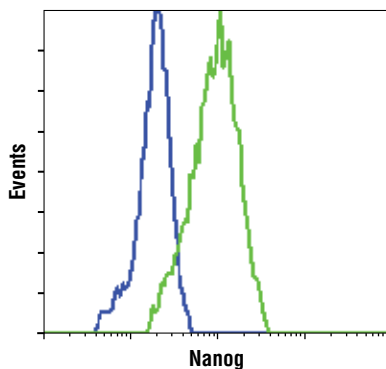
Background: Nanog is a homeodomain containing transcription factor that is essential for the maintenance of pluripotency and self renewal in embryonic stem cells (1). Nanog expression is controlled by a network of factors including Sox2 and the key pluripotency regulator Oct-4 (1). Recent advances in somatic cell reprogramming have utilized viral expression of combinations of transcription factors including Nanog, Oct-4, Sox2, KLF4, c-Myc and Lin28 (2,3).

Specificity/Sensitivity: Nanog Antibody detects endogenous levels of total nanog protein.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic (KLH-coupled) peptide corresponding to amino acid sequence at the N-terminus of human nanog. Antibodies are purified by Protein A and peptide affinity chromatography.

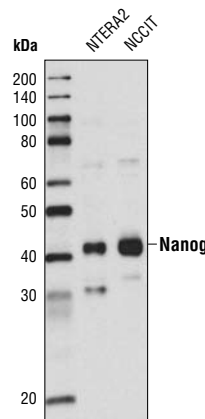
Background References:

- (1) Kim, J. et al. (2008) *Cell* 132, 1049–61.
- (2) Takahashi, K. et al. (2007) *Nat Protoc* 2, 3081–9.
- (3) Yu, J. et al. (2007) *Science* 318, 1917–20.

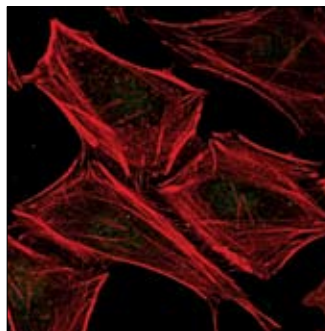
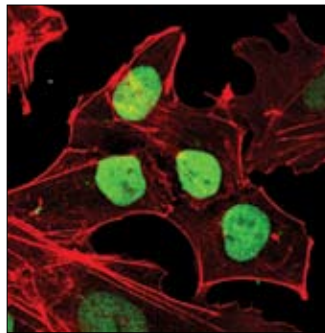


Flow cytometric analysis of HeLa cells (blue) and NTERA2 cells (green) using Nanog Antibody.

Confocal immunofluorescent analysis of NTERA2 cells (upper) and HeLa cells (lower) using Nanog Antibody (green). Actin filaments have been labeled with DY-554 phalloidin (red).



Western blot analysis of extracts of NTERA2 and NCCIT cells using Nanog Antibody.



Entrez-Gene ID #79923
Swiss-Prot Acc. #Q9H9S0

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C.
Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

Western blotting	1:1000
Immunofluorescence (IF-IC)	1:800
Flow Cytometry	1:400

For application specific protocols please see the web page for this product at www.cellsignal.com.

Companion Products:

Oct-4 (C30A3) Rabbit mAb #2840
Oct-4 (C52G3) Rabbit mAb #2890
Oct-4 (V241) Antibody #2788
Oct-4 Antibody #2750
Sox2 Antibody #2748
LIN28 (A177) Antibody #3978
LIN28 (P22) Antibody #3979
TCF3 (D15G11) Rabbit mAb #2883
Stat3 (79D7) Rabbit mAb #4904
Phototope®-HRP Western Blot Detection System, Anti-rabbit IgG, HRP-linked Antibody #7071
Anti-rabbit IgG, HRP-linked Antibody #7074
Prestained Protein Marker, Broad Range (Premixed Format) #7720
Biotinylated Protein Ladder Detection Pack #7727
20X LumiGLO® Reagent and 20X Peroxide #7003

Please visit www.cellsignal.com for a complete listing of recommended companion products.

IMPORTANT: For Western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.