



Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

#5232 Store at -20C

Nanog (D73G4) XP[®] Rabbit mAb (ChIP Formulated)

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
ChIP, ChIP-seq, C&R, C&T	H	Endogenous	Rabbit IgG	#Q9H9S0	79923

Product Usage Information

For optimal ChIP and ChIP-seq results, use 10 µl of antibody and 10 µg of chromatin (approximately 4 x 10⁶ cells) per IP. This antibody has been validated using SimpleChIP[®] Enzymatic Chromatin IP Kits.

The CUT&RUN dilution was determined using CUT&RUN Assay Kit #86652.

The CUT&Tag dilution was determined using CUT&Tag Assay Kit #77552.

Application	Dilution
Chromatin IP	1:50
Chromatin IP-seq	1:50
CUT&RUN	1:50
CUT&Tag	1:50

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

Nanog (D73G4) XP[®] Rabbit mAb (ChIP Formulated) detects endogenous levels of total nanog protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to the amino terminus of human nanog protein.

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).

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.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Applications Key

ChIP: Chromatin IP **ChIP-seq:** Chromatin IP-seq **C&R:** CUT&RUN **C&T:** CUT&Tag

Cross-Reactivity Key

H: Human

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