



Biotinylated Anti-mouse Nanog Antibody

ORDERING INFORMATION

Catalog Number: BAF2729

Lot Number: VKC01

Size: 50 µg

Formulation: 0.2 µm filtered solution in PBS with BSA

Storage: -20° C

Reconstitution: sterile 0.1% BSA in TBS

Specificity: mouse Nanog

Immunogen: *E. coli*-derived rmNanog (aa 154 - 262)

Ig Type: goat IgG

Application: Western blot

Preparation

Produced in goats immunized with purified, *E. coli*-derived, recombinant mouse Nanog (rmNanog; aa 154 - 262). Mouse Nanog specific IgG was purified by mouse Nanog affinity chromatography and then biotinylated. Nanog is a member of the homeobox family of DNA binding transcription factors that has been shown to maintain pluripotency of embryonic stem cells. Its expression is high in undifferentiated embryonic stem cells and is down-regulated during embryonic stem cell differentiation, concomitant with loss of pluripotency.¹⁻³

Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) containing 50 µg of bovine serum albumin (BSA) per 1 µg of antibody.

Reconstitution

Reconstitute with sterile Tris-buffered saline pH 7.3 (20 mM Trizma base, 150 mM NaCl) containing 0.1% BSA. If 1 mL of buffer is used, the antibody concentration will be 50 µg/mL.

Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C **in a manual defrost freezer** for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

Specificity

This antibody has been selected for use as a detection antibody in mouse Nanog Western blots.

Application

Western blot - This antibody can be used at 0.1 - 0.2 µg/mL with the appropriate secondary reagents to detect mouse Nanog. The detection limit for rmNanog is approximately 2 ng/lane under non-reducing and reducing conditions.

Optimal dilutions should be determined by each laboratory for each application.

References:

1. Mitsui, K. *et al.*, 2003, *Cell* 11(3):631 - 642.
2. Chambers, I. *et al.*, 2003, *Cell* 113(5):643 - 655.
3. Hart, A.H. *et al.*, 2004, *Dev. Dyn.* 230(1):187 - 198