

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Nanog in Western blots. In this format, approximately 50% cross-reactivity with recombinant human Nanog is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant mouse Nanog Trp154-Leu262 Accession # Q80Z64
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Mouse Nanog
Immunocytochemistry	5-15 µg/mL	Immersion fixed D3 mouse embryonic stem cell line

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

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).

References:

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