

DESCRIPTION

Species Reactivity	Human
Specificity	Detects Nanog in Western blots. In Western blots, less than 1% cross-reactivity with recombinant mouse Nanog is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Nanog Trp153-Val305 Accession # ABZ92376
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

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 Human Nanog
Immunocytochemistry	5-15 µg/mL	Immersion fixed Ntera-2 human testicular embryonic carcinoma 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.
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 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.