

## DESCRIPTION

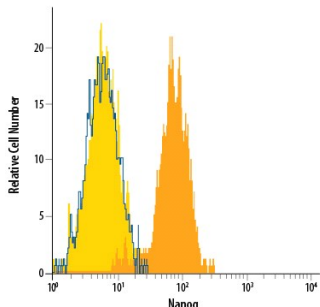
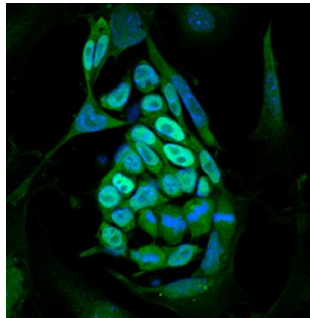
<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse Nanog in Western blots. In this format, approximately 50% cross-reactivity with recombinant human Nanog is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant mouse Nanog Trp154-Leu262 Accession # Q80Z64
<b>Conjugate</b>	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
<b>Formulation</b>	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.  *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

## 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
<b>Immunocytochemistry</b>	8-25 µg/mL	See Below
<b>Intracellular Staining by Flow Cytometry</b>	5 µL/10 <sup>6</sup> cells	See Below

## DATA

Intracellular Staining by Flow Cytometry	Immunocytochemistry
 <p><b>Detection of Nanog in D3 Mouse Cell Line by Flow Cytometry.</b> D3 mouse embryonic stem cell line either untreated (dark orange filled histogram) or treated with retinoic acid for 3 days (light orange filled histogram) was stained with Goat Anti-Mouse Nanog Alexa Fluor® 488-conjugated Antigen Affinity-purified Polyclonal Antibody (Catalog # IC2729G) or isotype control antibody (Catalog # IC108G, blue open histogram). To facilitate intracellular staining, cells were fixed with Flow Cytometry Fixation Buffer (Catalog # FC004) and permeabilized with Flow Cytometry Permeabilization/Wash Buffer I (Catalog # FC005). View our protocol for <a href="#">Staining Intracellular Molecules</a>.</p>	 <p><b>Nanog in D3 Mouse Embryonic Stem Cells.</b> Nanog was detected in immersion fixed D3 mouse embryonic stem cell line on irradiated mouse embryonic fibroblasts using Goat Anti-Mouse Nanog Alexa Fluor® 488-conjugated Antigen Affinity-purified Polyclonal Antibody (green; Catalog # IC2729G) at 10 µg/mL for 3 hours at room temperature. Cells were counterstained with DAPI (blue). Specific staining was localized to nuclei. View our protocol for <a href="#">Fluorescent ICC Staining of Stem Cells on Coverslips</a>.</p>

## PREPARATION AND STORAGE

<b>Shipping</b>	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<b>Protect from light. Do not freeze.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, 2 to 8 °C as supplied.</li> </ul>

## 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.

## PRODUCT SPECIFIC NOTICES

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