

## Product datasheet

### Anti-Nanog antibody ab14959

★★★★★ [2 Abreviews](#) [17 References](#) [2 Images](#)

#### Overview

<b>Product name</b>	Anti-Nanog antibody
<b>Description</b>	Rabbit polyclonal to Nanog
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB <b>Unsuitable for:</b> ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human
<b>Immunogen</b>	Synthetic peptide corresponding to Mouse Nanog aa 250 to the C-terminus (C terminal) conjugated to keyhole limpet haemocyanin. (Peptide available as <a href="#">ab14960</a> )
<b>General notes</b>	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal

Isotype

IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab14959 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (1)	Use a concentration of 1 µg/ml. Detects a band of approximately 34 kDa (predicted molecular weight: 34 kDa).

### Application notes

Is unsuitable for ICC/IF.

## Target

### Function

Transcription regulator involved in inner cell mass and embryonic stem (ES) cells proliferation and self-renewal. Imposes pluripotency on ES cells and prevents their differentiation towards extraembryonic endoderm and trophectoderm lineages. Blocks bone morphogenetic protein-induced mesoderm differentiation of ES cells by physically interacting with SMAD1 and interfering with the recruitment of coactivators to the active SMAD transcriptional complexes (By similarity). Acts as a transcriptional activator or repressor (By similarity). Binds optimally to the DNA consensus sequence 5'-TAAT[GT][GT]-3' or 5'-[CG][GA][CG]C[GC]ATTAN[GC]-3' (By similarity). When overexpressed, promotes cells to enter into S phase and proliferation.

### Tissue specificity

Expressed in testicular carcinoma and derived germ cell tumors (at protein level). Expressed in fetal gonads, ovary and testis. Also expressed in ovary teratocarcinoma cell line and testicular embryonic carcinoma. Not expressed in many somatic organs and oocytes.

### Sequence similarities

Belongs to the Nanog homeobox family.  
Contains 1 homeobox DNA-binding domain.

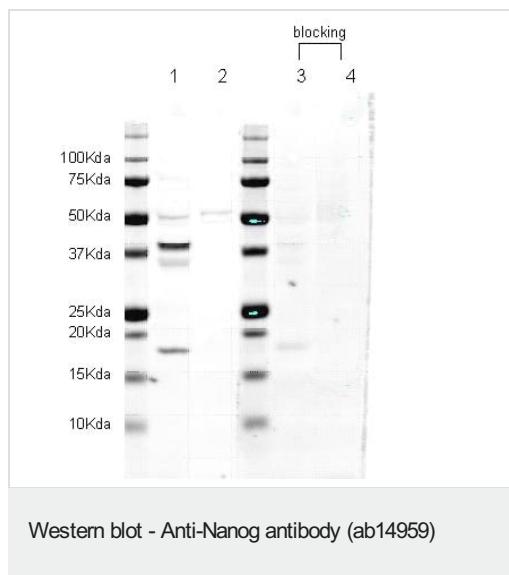
### Developmental stage

Expressed in embryonic stem (ES) and carcinoma (EC) cells. Expressed in inner cell mass (ICM) of the blastocyst and gonocytes between 14 and 19 weeks of gestation (at protein level). Not expressed in oocytes, unfertilized oocytes, 2-16 cell embryos and early morula (at protein level). Expressed in embryonic stem cells (ES). Expression decreases with ES differentiation.

### Cellular localization

Nucleus.

## Images



**All lanes :** Anti-Nanog antibody (ab14959) at 1 µg/ml

**Lanes 3-4 :** Mouse Nanog peptide (**ab14960**) at 1 µg/ml

**Predicted band size:** 34 kDa

**Observed band size:** 34.6 kDa

**Additional bands at:** 18 kDa (possible cross reactivity), 38 kDa (possible cross reactivity), 50 kDa (possible cross reactivity)

Lanes 1-4 : Nanog antibody (ab14959) at 1 ug/ml

Lanes 3-4 : Nanog peptide (**ab14960**) at 1 ug/ml

Observed band size: 34.2 kDa

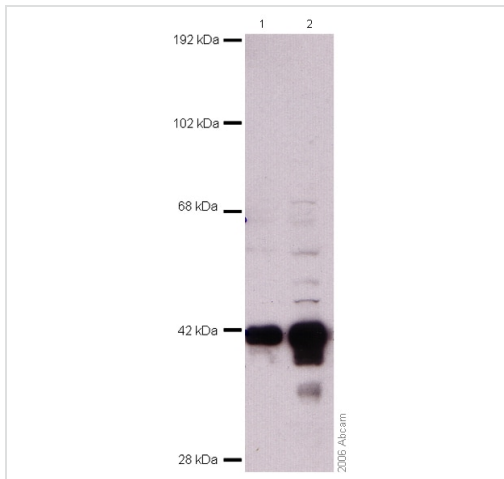
Additional bands at: 18 kDa (possible cross reactivity), 38 kDa (possible cross reactivity), 50 kDa (possible cross reactivity).

Lanes 1 and 3: Mouse embryonic stem cell lysate (positive control)

Lanes 2 and 4: Human embryonic stem cell lysate (negative control)

ab14959 recognised a band of the expected size for Nanog in mouse embryonic stem cells but not in human embryonic stem cells. Additional bands were also recognised in mouse embryonic stem cells.

Performed under reducing conditions.



Western blot - Anti-Nanog antibody (ab14959)

This image is courtesy of Adam Yates and Ian Chambers, University of Edinburgh

**All lanes :** Anti-Nanog antibody (ab14959) at 0.8 µg/ml

**All lanes :** ES Cell Nuclear Extract

**Predicted band size:** 34 kDa

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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