

## Product datasheet

# Mouse Nanog ELISA Kit ab242249

Recombinant SimpleStep ELISA®

4 Images

### Overview

**Product name** Mouse Nanog ELISA Kit

**Detection method** Colorimetric

**Precision**

Intra-assay

Sample	n	Mean	SD	CV%
cell extract	8			7.5%

**Sample type** Cell culture extracts

**Assay type** Sandwich (quantitative)

**Sensitivity** 54.2 pg/ml

**Range** 0.23 ng/ml - 15 ng/ml

**Recovery**

Sample specific recovery

Sample type	Average %	Range
Cell culture extracts	99	66% - 143%

**Assay time** 1h 30m

**Assay duration** One step assay

**Species reactivity** **Reacts with:** Mouse

**Product overview**

Mouse Nanog ELISA Kit (ab242249) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of Nanog protein in cell culture extracts. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse Nanog with 54.2 pg/ml sensitivity.

SimpleStep ELISA® technology employs capture antibodies conjugated to an affinity tag that is recognized by the monoclonal antibody used to coat our SimpleStep ELISA® plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. See the SimpleStep ELISA® protocol summary in the image section for further details. Our SimpleStep ELISA® technology provides several benefits:

- Single-wash protocol reduces assay time to 90 minutes or less
- High sensitivity, specificity and reproducibility from superior antibodies
- Fully validated in biological samples
- 96-wells plate breakable into 12 x 8 wells strips

A 384-well SimpleStep ELISA® microplate ([ab203359](#)) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

**Notes** Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of products that contain European Authorisation list (Annex XIV) substances. It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.

**Platform** Pre-coated microplate (12 x 8 well strips)

## Properties

**Storage instructions** Store at +4°C. Please refer to protocols.

Components	1 x 96 tests
10X Mouse Nanog Capture Antibody	1 x 600µl
10X Mouse Nanog Detector Antibody	1 x 600µl
10X Wash Buffer PT ( <a href="#">ab206977</a> )	1 x 20ml
50X Cell Extraction Enhancer Solution	1 x 1ml
5X Cell Extraction Buffer PTR ( <a href="#">ab193970</a> )	1 x 10ml
Antibody Diluent 4BR	1 x 6ml
Mouse Nanog Lyophilized recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS ( <a href="#">ab193972</a> )	1 x 12ml
SimpleStep Pre-Coated 96-Well Microplate ( <a href="#">ab206978</a> )	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

**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 trophoctoderm 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.

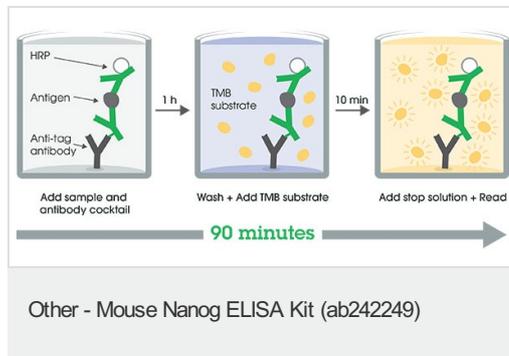
### Developmental stage

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.

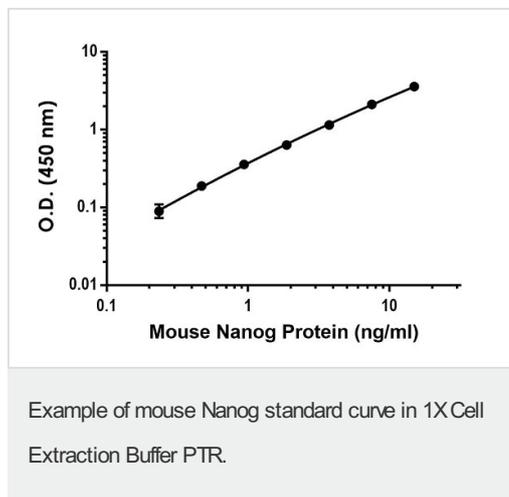
### Cellular localization

Nucleus.

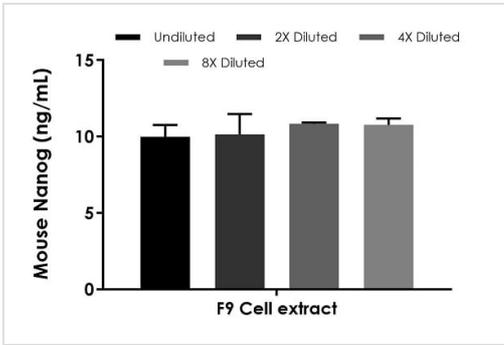
## Images



SimpleStep ELISA technology allows the formation of the antibody-antigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.



The Nanog standard curve was prepared as described in Section 10. Raw data values are shown in the table. Background-subtracted data values (mean +/- SD) are graphed.



Interpolated concentrations of native Nanog in mouse F9 cell extract based on a 400 µg/mL extract load.

The concentrations of Nanog were measured in duplicate and interpolated from the Nanog standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Nanog concentration was determined to be 9.96 ng/mL.

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recombinant antibodies

**Research with confidence**  
Consistent and reproducible results

**Long-term and scalable supply**  
Recombinant technology

**Success from the first experiment**  
Confirmed specificity

**Ethical standards compliant**  
Animal-free production

Sandwich ELISA - Mouse Nanog ELISA Kit  
(ab242249)

To learn more about the advantages of recombinant antibodies see [here](#).

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