

Product datasheet

Anti-Nanog antibody [NNG-811] ab62734

★★★★★ [3 Abreviews](#) [40 References](#) [3 Images](#)

Overview

Product name	Anti-Nanog antibody [NNG-811]
Description	Mouse monoclonal [NNG-811] to Nanog
Host species	Mouse
Tested applications	Suitable for: WB, ICC/IF, IP
Species reactivity	Reacts with: Human
Immunogen	Recombinant full length human Nanog.
Positive control	Extracts of NT2 cells.
General notes	<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&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	<p>pH: 7.40</p> <p>Preservative: 0.097% Sodium azide</p> <p>Constituent: 0.0268% PBS</p>
Purity	IgG fraction
Purification notes	Purified Immunoglobulin
Clonality	Monoclonal
Clone number	NNG-811
Isotype	IgG1

Applications

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab62734 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 2 - 4 µg/ml. Detects a band of approximately 40 kDa (predicted molecular weight: 35 kDa).
ICC/IF		Use a concentration of 5 µg/ml.
IP		Use at an assay dependent concentration.

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.

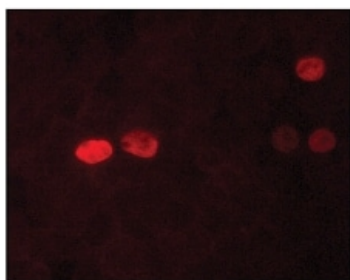
Developmental stage

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

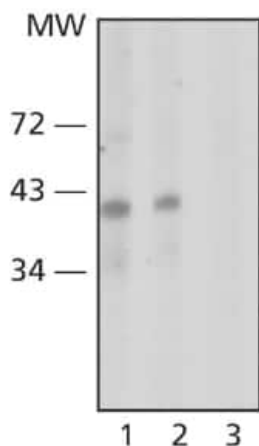
Nucleus.

Images



3T3 mouse fibroblasts were transfected with a mammalian expression vector expressing human Nanog and stained with ab62734 (5 µg/mL) followed by Goat Anti-Mouse, Cy3 conjugate. A clear detection of Nanog can be seen in nuclei of transfected cells.

Immunocytochemistry/ Immunofluorescence - Anti-Nanog antibody [NNG-811] (ab62734)



Western blot - Anti-Nanog antibody [NNG-811]
(ab62734)

Lane 1 : Anti-Nanog antibody [NNG-811] (ab62734) at 10 µg/ml

Lane 2 : Anti-Nanog antibody [NNG-811] (ab62734) at 2 µg/ml

Lane 3 : Negative control – no primary antibody

All lanes : Cell extract of NT2 cells

Lysates/proteins at 20 µg per lane.

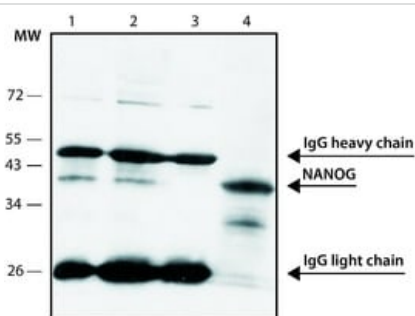
Secondary

All lanes : Goat Anti-Mouse IgG

Developed using the ECL technique.

Predicted band size: 35 kDa

Observed band size: 40 kDa



Immunoprecipitation - Anti-Nanog antibody [NNG-811] (ab62734)

Nanog was immunoprecipitated from NT2/D1 (human embryonal testis carcinoma cell line) whole cell extract using ab62734.

Lane 1: 5 µg ab62734 IP in NT2/D1 whole cell extract.

Lane 2: 10 µg ab62734 IP in NT2/D1 whole cell extract.

Lane 3: Negative control without cell extract.

Lane 4: NT2/D1 whole cell extract (input).

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

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