abcam

Product datasheet

Anti-Nanog antibody [EPR2027(2)] - BSA and Azide free ab218524



重组 RabMAb

15 References 13 图像

概述

产品名称 Anti-Nanog抗体[EPR2027(2)] - BSA and Azide free

描述 兔单克隆抗体[EPR2027(2)] to Nanog - BSA and Azide free

宿主 Rabbit

特异性 100% identities with NANOGP8

经测试应用 适用于: Flow Cyt (Intra), WB, IHC-P, ICC/IF, ChIP-sequencing, IP

种属反应性 与反应: Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

阳性对照 WB: NCCIT cell lysate. IHC-P: Human seminoma tissue, Human dysgerminoma tissue and

Human embryonal carcinoma tissue. ICC/IF: Human embryonic carcinoma and Human liver cell

lines. IP: NCCIT whole cell lysate. ChIP-seq: NCCIT cells.

常规说明 ab218524 is the carrier-free version of ab109250.

> Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**[®] **patents**.

Mouse: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C. Do Not Freeze.

存储溶液 pH: 7.20

Constituent: PBS

无载体 是

纯**度** Protein A purified

克隆 单克隆

克隆编号 EPR2027(2)

同种型 IgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab218524于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Flow Cyt (Intra)		Use at an assay dependent concentration. ab199376 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
WB		Use at an assay dependent concentration. Detects a band of approximately 37 kDa (predicted molecular weight: 35 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. See IHC antigen retrieval protocols. Antigen retrieval is recommended.
ICC/IF		Use at an assay dependent concentration.
ChIP-sequencing		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.

靶标

功能

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.

组织特异性

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.

序列相似性

Belongs to the Nanog homeobox family.

Contains 1 homeobox DNA-binding domain.

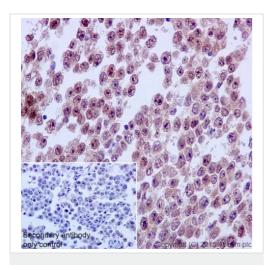
发展阶段

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.

细胞定位

Nucleus.

图片

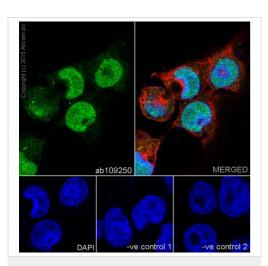


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Nanog antibody

[EPR2027(2)] - BSA and Azide free (ab218524)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human seminoma tissue labelling Nanog with purified ab109250 at 1/100. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. ab97051, a goat antirabbit IgG H&L (HRP) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab109250).



Immunocytochemistry/ Immunofluorescence - Anti-Nanog antibody [EPR2027(2)] - BSA and Azide free (ab218524)

100

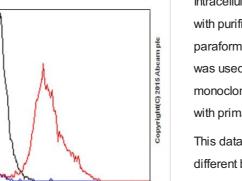
Counts

Immunocytochemistry/Immunofluorescence analysis of NCCIT(human pluripotent embryonal carcinoma) cells labelling Nanog with purified ab109250 at 1/250. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. ab150077, an Alexa Fluor[®] 488-conjugated goat anti-rabbit IgG (1/500) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain. ab7291, a mouse anti-tubulin (1/1000) and ab150120, an Alexa Fluor[®] 594-conjugated goat anti-mouse IgG (1/1000) were also used.

Control 1: primary antibody (1/100) and secondary antibody, <u>ab150120</u>, an Alexa Fluor[®] 594-conjugated goat anti-mouse lgG (1/500).

Control 2: $\underline{ab7291}$ (1/1000) and secondary antibody, $\underline{ab150077}$, an Alexa Fluor[®] 488-conjugated goat anti-rabbit lgG (1/500).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab109250).

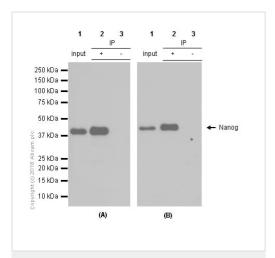


Flow Cytometry (Intracellular) - Anti-Nanog antibody [EPR2027(2)] - BSA and Azide free (ab218524)

Nanog -FITC (530/30BP)

Intracellular Flow Cytometry analysis of NCCIT cells labelling Nanog with purified <u>ab109250</u> at 1/70 (red). Cells were fixed with 4% paraformaldehyde. A FITC-conjugated goat anti-rabbit lgG (1/500) was used as the secondary antibody. Black - Isotype control, rabbit monoclonal lgG. Blue - Unlabelled control, cells without incubation with primary and secondary antibodies.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab109250).



Immunoprecipitation - Anti-Nanog antibody

[EPR2027(2)] - BSA and Azide free (ab218524)

<u>ab109250</u> (purified) at 1/40 dilution (1.5 μg/ml) immunoprecipitating Nanog in NCCIT whole cell lysate.

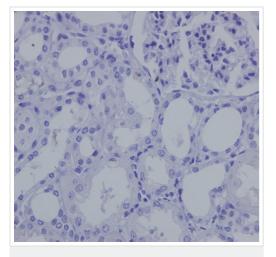
Lane 1 (input): NCCIT(Human pluripotent embryonic carcinoma epithelial cell) whole cell lysate 10µg

Lane 2 (+): ab109250 & NCCIT whole cell lysate

Lane 3 (-): Rabbit monoclonal lgG (<u>ab172730</u>) instead of ab109250 in NCCIT whole cell lysate

For western blotting, <u>ab109250</u> at 1/500 dilution (1.5 μ g/ml) VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>) was used for detection at 1/1000 dilution.

Blocking and diluting buffer: 5% NFDM /TBST.

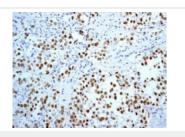


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Nanog antibody

[EPR2027(2)] - BSA and Azide free (ab218524)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human adult kidney tissue shows negative staining of Nanog with unpurified <u>ab109250</u>.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab109250</u>).

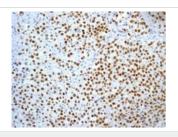


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Nanog antibody

[EPR2027(2)] - BSA and Azide free (ab218524)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human seminoma tissue labelling Nanog with unpurified <u>ab109250</u> at 1/100.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab109250</u>).

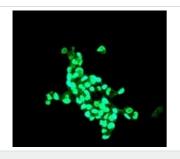


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Nanog antibody

[EPR2027(2)] - BSA and Azide free (ab218524)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human dysgerminoma tissue labelling Nanog with unpurified <u>ab109250</u> at 1/100.

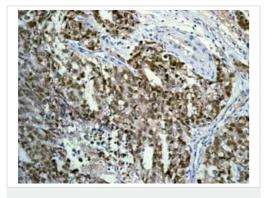
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab109250</u>).



Immunocytochemistry/ Immunofluorescence - Anti-Nanog antibody [EPR2027(2)] - BSA and Azide free (ab218524)

Immunocytochemistry/Immunofluorescence analysis of embryonic carcinoma cells labelling Nanog with unpurified <u>ab109250</u> at 1/100.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab109250</u>).

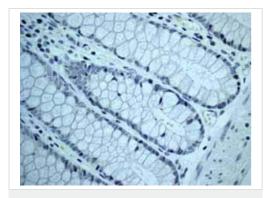


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Nanog antibody

[EPR2027(2)] - BSA and Azide free (ab218524)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human embryonal carcinoma tissue labelling Nanog with unpurified <u>ab109250</u> at 1/100.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab109250</u>).

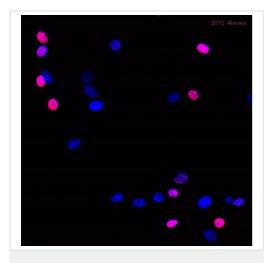


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Nanog antibody

[EPR2027(2)] - BSA and Azide free (ab218524)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human normal colon tissue shows negative staining of Nanog with unpurified <u>ab109250</u>.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab109250).

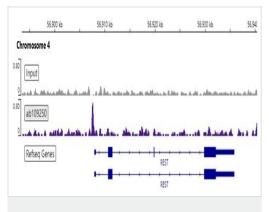


Immunocytochemistry/ Immunofluorescence - Anti-Nanog antibody [EPR2027(2)] - BSA and Azide free (ab218524)

This image is courtesy of an anonymous Abreview.

Immunocytochemistry/Immunofluorescence analysis of Human Liver cells labelling Nanog with unpurified **ab109250**. Cells were fixed with Paraformaldehyde, permeabilized with Triton X-100 0.1% and blocked with 1% BSA for 12 hours at 4°C. Sample was incubated with primary antibody (1/500 in PBS) for 16 hour at 4°C. An Alexa Fluor[®]647-conjugated Donkey anti-rabbit(1/1000) lgG polyclonal was used as the secondary antibody.

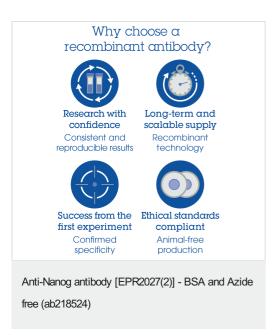
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab109250).



ChIP-sequencing - Anti-Nanog antibody
[EPR2027(2)] - BSA and Azide free (ab218524)

Chromatin was prepared from NCCIT (Human pluripotent embryonic carcinoma cell line) cells. ChIP was performed with 10^7 NCCIT cells and 8 µg of <u>ab109250</u> [[EPR2027(2)]. ChIP DNA was sequenced on the Illumina NovaSeq 6000 to a depth of 30 million reads.

Additional screenshots of mapped reads can be downloaded <u>here</u>. This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab109250</u>).



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