

Product datasheet

Anti-Nanog antibody [EPR2027(2)] ab109250

リコンビナント RabMAb®

★★★★★ 9 Abreviews 22 References 画像数 12

製品の概要

製品名	Anti-Nanog antibody [EPR2027(2)]
製品の詳細	Rabbit monoclonal [EPR2027(2)] to Nanog
由来種	Rabbit
特異性	100% identities with NANOGP8
アプリケーション	適用あり: WB, IHC-P, ICC/IF, Flow Cyt
種交差性	交差種: Human
免疫原	Synthetic peptide within Human Nanog aa 1-100 (N terminal). The exact sequence is proprietary. Database link: Q9H9S0
ポジティブ・コントロール	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.
特記事項	<p>Mouse: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p> <p>Please note that Nanog is expressed variably in different tissues and that optimisation may be required depending on the tissue used for the experiment.</p> <p>Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents</p> <p>We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.</p> <p>This product is a recombinant rabbit monoclonal antibody.</p>

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.

バッファー	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol, 59% PBS, 0.05% BSA
精製度	Protein A purified
ポリモノ	モノクローナル
クローン名	EPR2027(2)
アイソタイプ	IgG

アプリケーション

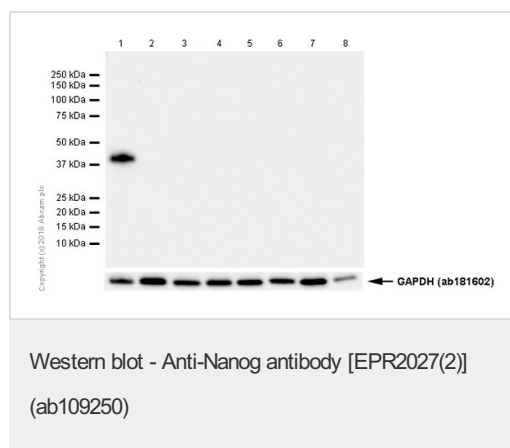
Our [Abpromise guarantee](#) covers the use of **ab109250** in the following tested applications.

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

アプリケーション	Abreviews	特記事項
WB	★★★★★	1/1000 - 1/10000. Detects a band of approximately 37 kDa (predicted molecular weight: 35 kDa).
IHC-P	★★★★★	1/100 - 1/250. See IHC antigen retrieval protocols . Antigen retrieval is recommended.
ICC/IF	★★★★☆	1/100 - 1/250.
Flow Cyt		1/70. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

ターゲット情報

機能	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 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.
組織特異性	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.
配列類似性	Belongs to the Nanog homeobox family. Contains 1 homeobox DNA-binding domain.
発生段階	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.
細胞内局在	Nucleus.



All lanes : Anti-Nanog antibody [EPR2027(2)] (ab109250) at 1/2000 dilution

Lane 1 : NCCIT (Human pluripotent embryonic carcinoma epithelial cell) whole cell lysates with 5% NFDM/TBST

Lane 2 : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates with 5% NFDM/TBST

Lane 3 : HEK-293 (Human embryonic kidney epithelial cell) whole cell lysates with 5% NFDM/TBST

Lane 4 : MDA-MB-231 (Human breast adenocarcinoma epithelial cell) whole cell lysates with 5% NFDM/TBST

Lane 5 : HepG2 (Human hepatocellular carcinoma epithelial cell) whole cell lysates with 5% NFDM/TBST

Lane 6 : Huh7 (Human hepatocellular carcinoma epithelial cell) whole cell lysates with 5% NFDM/TBST

Lane 7 : HCT 116 (Human colorectal carcinoma epithelial cell) whole cell lysates with 5% NFDM/TBST

Lane 8 : PANC-1 (Human pancreatic epithelioid carcinoma epithelial cell) whole cell lysates with 5% NFDM/TBST

Lysates/proteins at 20 µg per lane.

Secondary

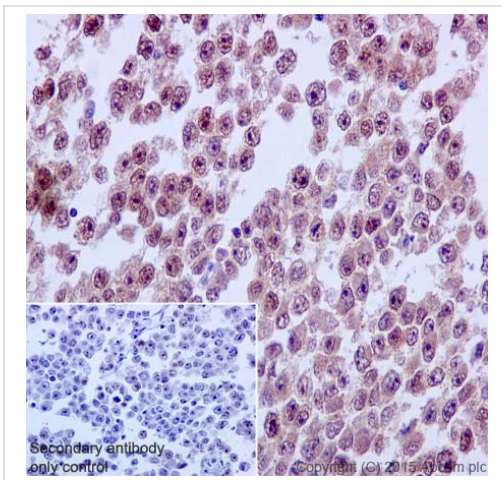
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

Predicted band size: 35 kDa

Observed band size: 37 kDa

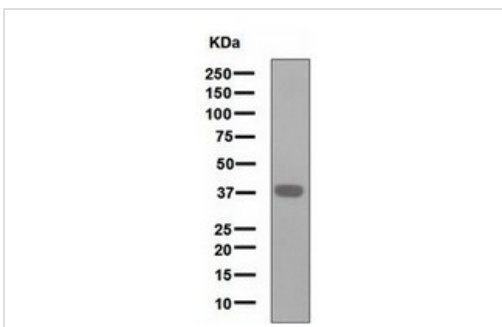
Exposure time: 30 seconds

Nanog is highly expressed in cancer stem cells. Although some papers support the expression in undifferentiated cancer cell lines, such as HeLa (PMID: 22337995, 28092370), MDA-MB-231 (PMID: 28401007, 25919570), HepG2 (PMID: 29477378), Huh7 (PMID: 26919045), HCT 116 (PMID: 25249558, 28092370) and PANC-1 (PMID: 28703793, 25846752), ab109250 can't detect the target band in these cell lines, even at the dilution of 1:200.



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 anti-rabbit IgG H&L (HRP) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.

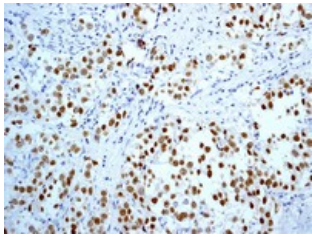
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nanog antibody [EPR2027(2)] (ab109250)



Anti-Nanog antibody [EPR2027(2)] (ab109250) at 1/1000 dilution (unpurified) + NCCIT cell lysate at 10 µg

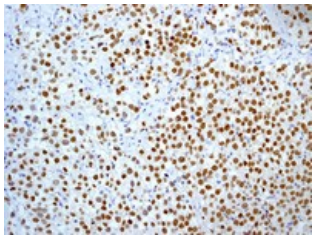
Predicted band size: 35 kDa
Observed band size: 37 kDa

Western blot - Anti-Nanog antibody [EPR2027(2)] (ab109250)



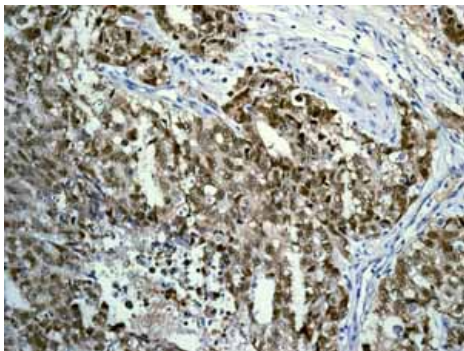
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nanog antibody [EPR2027(2)] (ab109250)

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



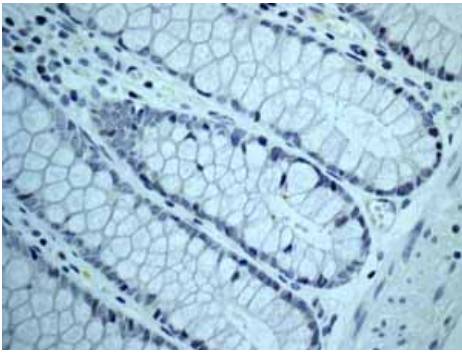
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nanog antibody [EPR2027(2)] (ab109250)

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



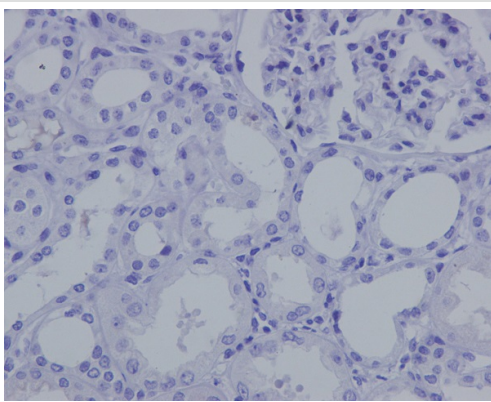
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nanog antibody [EPR2027(2)] (ab109250)

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



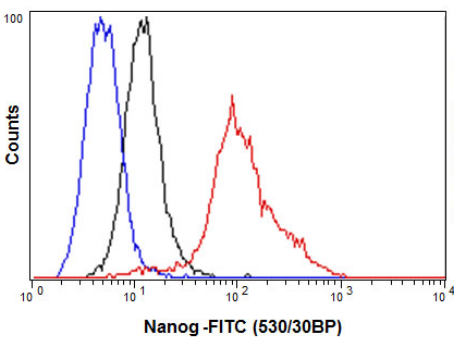
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nanog antibody [EPR2027(2)] (ab109250)

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



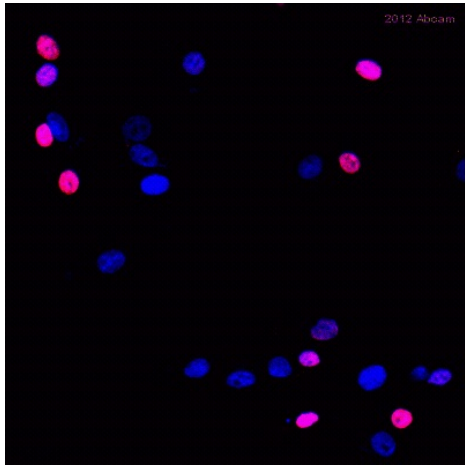
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nanog antibody [EPR2027(2)] (ab109250)

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



Flow Cytometry - Anti-Nanog antibody [EPR2027(2)] (ab109250)

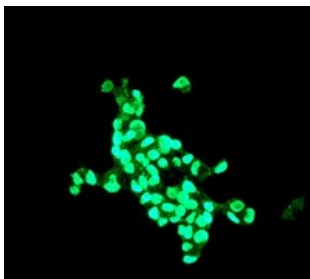
Flow Cytometry analysis of NCCIT cells labelling Nanog with purified ab109250 at 1/70 (red). Cells were fixed with 4% paraformaldehyde. A FITC-conjugated goat anti-rabbit IgG (1/500) was used as the secondary antibody. Black - Isotype control, rabbit monoclonal IgG. Blue - Unlabelled control, cells without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



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) IgG polyclonal was used as the secondary antibody.

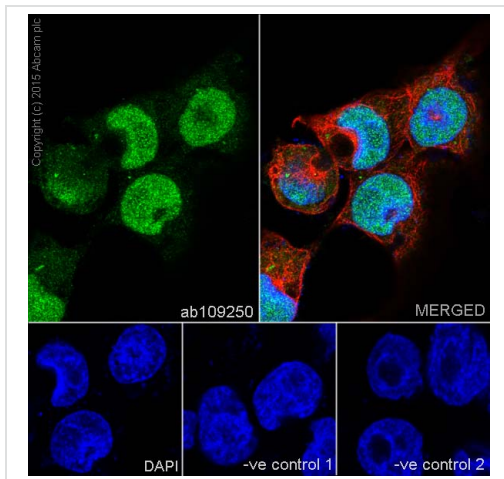
Immunocytochemistry/ Immunofluorescence - Anti-Nanog antibody [EPR2027(2)] (ab109250)

This image is courtesy of an anonymous Abreview



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

Immunocytochemistry/ Immunofluorescence - Anti-Nanog antibody [EPR2027(2)] (ab109250)



Immunocytochemistry/ Immunofluorescence - Anti-Nanog antibody [EPR2027(2)] (ab109250)

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, **ab150120**, an Alexa Fluor[®] 594-conjugated goat anti-mouse IgG (1/500).

Control 2: **ab7291** (1/1000) and secondary antibody, **ab150077**, an Alexa Fluor[®] 488-conjugated goat anti-rabbit IgG (1/500).

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