abcam

Product datasheet

Alexa Fluor® 488 Anti-Nanog antibody [EPR2027(2)] ab196155

Recombinant RabMAb

4 Images

Overview

Product name Alexa Fluor® 488 Anti-Nanog antibody [EPR2027(2)]

Description Alexa Fluor® 488 Rabbit monoclonal [EPR2027(2)] to Nanog

Host species Rahhit

Conjugation Alexa Fluor® 488, Ex: 495nm, Em: 519nm

Tested applications Suitable for: ICC/IF Species reactivity Reacts with: Human

Immunogen Synthetic peptide within Human Nanog aa 1-100 (N terminal). The exact sequence is proprietary.

Positive control ICC/IF: NCCIT Negative control: ICC/IF: HeLa

General notes 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.

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Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise $^{\text{TM}}$ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been "predicted to work with," however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. 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, as well as customer reviews and Q&As.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle. Store In the Dark.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 30% Glycerol, PBS, 1% BSA

Purity Immunogen affinity purified

Clonality Monoclonal
Clone number EPR2027(2)

Isotype IgG

Applications

Our Abpromise guarantee covers the use of ab196155 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
ICC/IF		1/50.

Target

Function

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.

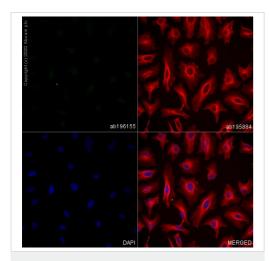
Developmental stage

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

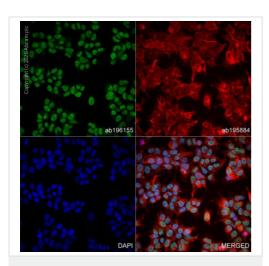
Nucleus.

Images



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-Nanog antibody [EPR2027(2)] (ab196155) ab196155 staining Nanog in HeLa cells (negative). The cells were fixed with 4% formaldehyde (10 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 10% normal goat serum in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab196155 at 1/100 dilution (shown in green) and ab195884, Rat monoclonal to alpha Tubulin (Alexa Fluor[®] 647), at 1/200 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue).

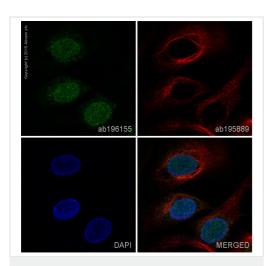
Image was taken with a confocal high content analyser (Perkin Elmer, Operetta-CLS).



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-Nanog antibody [EPR2027(2)] (ab196155)

ab196155 staining Nanog in NCCIT cells. The cells were fixed with 4% formaldehyde (10 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 10% normal goat serum in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab196155 at 1/100 dilution (shown in green) and ab195884, Rat monoclonal to alpha Tubulin (Alexa Fluor[®] 647), at 1/200 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue).

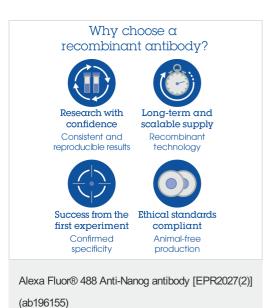
Image was taken with a confocal high content analyser (Perkin Elmer, Operetta-CLS).



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-Nanog antibody [EPR2027(2)] (ab196155)

ab196155 staining Nanog in Sk-ov-3 cells. The cells were fixed with 4% formaldehyde (10 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 10% normal goat serum in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab196155 at 1/50 dilution (shown in green) and ab195889, Mouse monoclonal to alpha Tubulin (Alexa Fluor[®] 594), at 1/200 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue).

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



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