

Anti-Nanog Antibody Picoband™

Catalog Number: A00153-3

About NANOG

NANOG (pron. nanOg) is a transcription factor critically involved with self-renewal of undifferentiated embryonic stem cells. In humans, this protein is encoded by the NANOG gene. It is mapped to 12p13.31. NANOG is thought to be a key factor in maintaining pluripotency. Moreover, NANOG is also thought to function in concert with other factors such as POU5F1 (Oct-4) and SOX2 to establish ESC identity. The [NANOG protein](#) has been found to be a transcriptional activator for the Rex1 promoter, playing a key role in sustaining Rex1 expression. Knockdown of NANOG in embryonic stem cells results in a reduction of Rex1 expression, while forced expression of NANOG stimulates Rex1 expression.

Overview

Product Name	Anti-Nanog Antibody Picoband™
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Nanog Antibody Picoband™ catalog # A00153-3. Tested in Flow Cytometry, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	Flow Cytometry, WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	Q9H9S0

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human Nanog, different from the related mouse sequence by three amino acids.
Predicted Reactive Species	Chicken
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.

Purification	Immunogen affinity purified.
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat Flow Cytometry, 1-3ug/1x10⁶ cells, Human

Anti-Nanog Antibody Picoband™ (A00153-3) Images

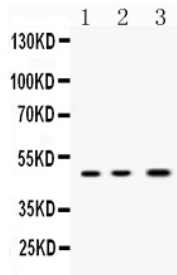


Figure 1. Western blot analysis of Nanog using anti-Nanog antibody (A00153-3). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat ovary tissue lysates, Lane 2: mouse ovary tissue lysates, Lane 3: MCF-7 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Nanog antigen affinity purified polyclonal antibody (Catalog # A00153-3) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Nanog at approximately 48KD. The expected band size for Nanog is at 34KD.

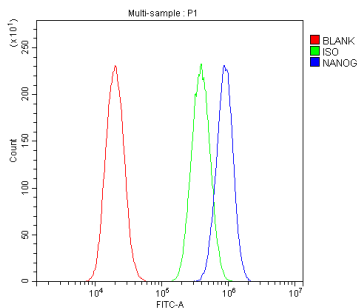


Figure 2. Flow Cytometry analysis of A549 cells using anti-Nanog antibody (A00153-3). Overlay histogram showing A549 cells stained with A00153-3 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Nanog Antibody (A00153-3, 1ug/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

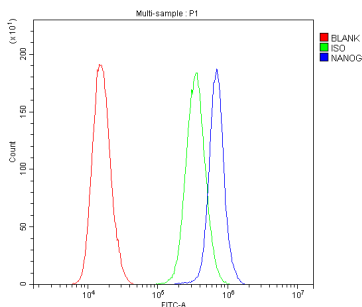


Figure 3. Flow Cytometry analysis of PC-3 cells using anti-Nanog antibody (A00153-3). Overlay histogram showing PC-3 cells stained with A00153-3 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Nanog Antibody (A00153-3, 1ug/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

1 Publications Citing This Product

1. PubMed ID: 10.1155/2021/8493431, LncRNA LINC00662 Exerts an Oncogenic Effect on Osteosarcoma by the miR-16-5p/ITPR1 Axis

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