

For Research Use Only

Nanog Recombinant antibody, PBS Only (Capture/Detector)

Catalog Number: 80210-13-PBS



Basic Information

| | | |
|---|--|---|
| Catalog Number: 80210-13-PBS | GenBank Accession Number: BC160187 | Purification Method: Protein A purification |
| Size: 100ug , Concentration: 1 mg/ml by Nanodrop; | GeneID (NCBI): 79923 | CloneNo.: 250067F10 |
| Source: Rabbit | UNIPROT ID: Q9H9S0 | |
| Isotype: IgG | Full Name: Nanog homeobox | |
| Immunogen Catalog Number: AG5645 | Calculated MW: 35 kDa | |
| | Observed MW: 35-40 kDa | |

Applications

Tested Applications:
WB, IF/ICC, Cytometric bead array, Sandwich ELISA, Indirect ELISA, Sample test

Species Specificity:
human, mouse, rat

Product Information

80210-13-PBS targets Nanog as part of a matched antibody pair:

MP02157-1: 80210-11-PBS capture and 80210-13-PBS detection (validated in Cytometric bead array)

MP02157-2: 80210-13-PBS capture and 80210-12-PBS detection (validated in Cytometric bead array, Sandwich ELISA)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

Background Information

Nanog is a member of the homeobox family of DNA binding transcription factors and has been shown to maintain embryonic stem (ES) cell self-renewal independently of leukemia inhibitory factor (LIF)/Stat3. Nanog mRNA is present in pluripotent mouse and human cell lines, and absent from differentiated cells. Functionally, Nanog works together with other key pluripotent factors (Oct4, Sox2, and Lin28) to reprogram human fibroblasts and generate induced pluripotent stem (iPS) cells. These key factors form a regulatory network to support or limit each other's expression level, which maintains the properties of ES cells. There are two kinds of variants that can be recognized by NANOg, one is a normal form (~39 kDa), the other is a post-translation modified form (~48 kDa) (21136380). Nanog has two isoforms with molecular weights of 34.4 kDa and 31.9 kDa. (PMID: 21969378)

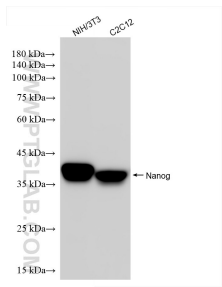
Storage

Storage:
Store at -80°C.
Storage Buffer:
PBS only, pH7.3

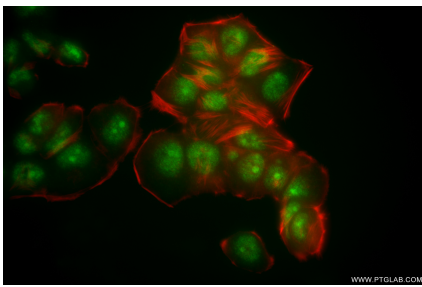
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

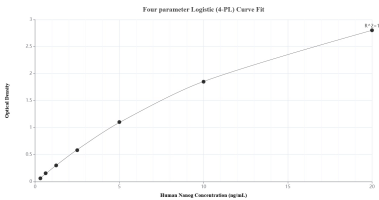
Selected Validation Data



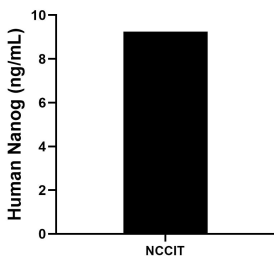
Various lysates were subjected to SDS PAGE followed by western blot with 80210-13-RR (NANOG antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 80210-13-PBS in a different storage buffer formulation.



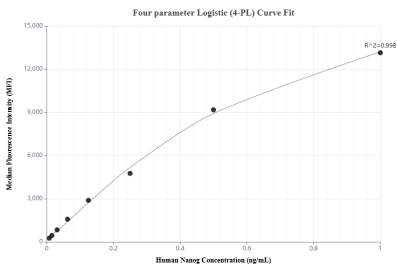
Immunofluorescent analysis of (4% PFA) fixed NCCIT cells using Nanog antibody (80210-13-RR, Clone: 250067F10) at dilution of 1:500 and Coralite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 80210-13-PBS in a different storage buffer formulation.



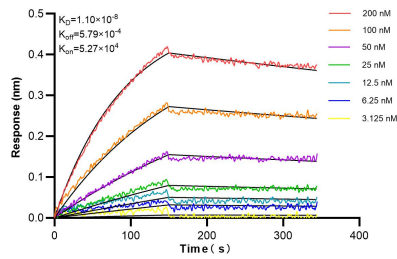
Sandwich ELISA standard curve of MP02157-2, Human Nanog Recombinant Matched Antibody Pair - PBS only. 80210-13-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag5645. 80210-12-PBS was HRP conjugated as the detection antibody. Range: 0.313-20 ng/mL



The mean Nanog concentration was determined to be 9.25 ng/mL in NCCIT cell extract based on a 1.50 mg/mL extract load.



Cytometric bead array standard curve of MP02157-2, Nanog Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 80210-13-PBS. Detection antibody: 80210-12-PBS. Standard: Ag5645. Range: 0.781-100 ng/mL



Biolayer interferometry (BLI) kinetic assays of 80210-13-RR against Human Nanog were performed. The affinity constant is 11.0 nM.