

# Nanog Recombinant antibody

Catalog Number: 80210-13-RR

## Basic Information

<b>Catalog Number:</b> 80210-13-RR	<b>GenBank Accession Number:</b> BC160187	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul, Concentration: 1000 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 79923	<b>CloneNo.:</b> 250067F10
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q9H9S0	<b>Recommended Dilutions:</b> WB 1:2000-1:10000 IF/ICC 1:250-1:1000
<b>Isotype:</b> IgG	<b>Full Name:</b> Nanog homeobox	
<b>Immunogen Catalog Number:</b> AG5645	<b>Calculated MW:</b> 35 kDa	
	<b>Observed MW:</b> 35-40 kDa	

## Applications

<b>Tested Applications:</b> WB, IF/ICC, ELISA	<b>Positive Controls:</b>
<b>Species Specificity:</b> human, mouse, rat	<b>WB :</b> NIH/3T3 cells, mouse brain tissue, rat brain tissue, C2C12 cells
	<b>IF/ICC :</b> NCCIT cells,

## 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

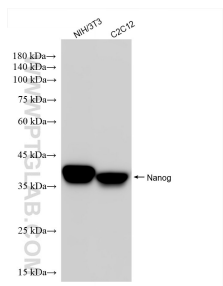
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
**Aliquoting is unnecessary for -20°C storage**

\*\*\* 20ul sizes contain 0.1% BSA

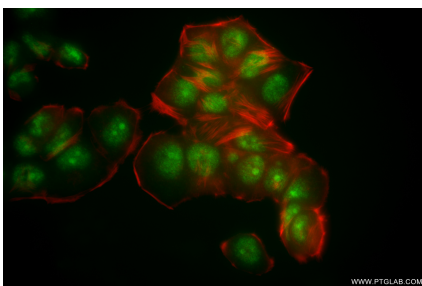
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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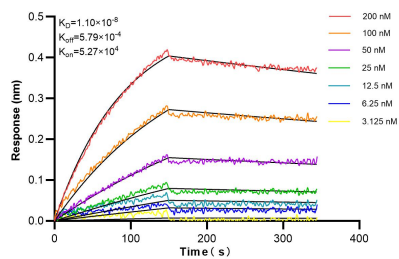
## Selected Validation Data



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.



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).



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