NANOG Polyclonal antibody

**Catalog Number:** 14295-1-AP

**Basic Information**

- **Catalog Number:** 14295-1-AP
- **Size:** 150μl, Concentration: 750 μg/ml by Nanodrop
- **Source:** Rabbit
- **Isotype:** IgG
- **Immunogen Catalog Number:** AG5645
- **GenBank Accession Number:** BC160187
- **GeneID (NCBI):** 79923
- **Full Name:** Nanog homeobox
- **Calculated MW:** 35 kDa
- **Observed MW:** 35-40 kDa
- **Purification Method:** Antigen affinity purification
- **Recommended Dilutions:** WB 1:500-1:3000, IF 1:20-1:200

**Applications**

- **Tested Applications:** FC, IF, WB, ELISA
- **Cited Applications:** IF, IHC, IP, WB
- **Species Specificity:** human, mouse, rat
- **Cited Species:** human, rat, mouse, pig, marmoset

**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. Affinity purified rabbit anti-Nanog can be used to demonstrate pluripotency of ES and IPS cells. There are two kinds of variants could recognized by NANOG, one is normal form (~39kd), the other is post-translation modified form (~48kd) (21136380). Nanog exists two isoforms with molecular weight 34.4 kDa and 31.9 kDa. (PMID: 21969378)

**Notable Publications**

<table>
<thead>
<tr>
<th>Author</th>
<th>Pubmed ID</th>
<th>Journal</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ana Kojic</td>
<td>36194907</td>
<td>Stem Cell Res</td>
<td>IF</td>
</tr>
<tr>
<td>Chenlong Li</td>
<td>31558707</td>
<td>Cell Death Dis</td>
<td>WB</td>
</tr>
<tr>
<td>Chaoqun Liu</td>
<td>34551797</td>
<td>J Exp Clin Cancer Res</td>
<td>WB</td>
</tr>
</tbody>
</table>

**Storage**

- **Storage:** Store at -20°C. Stable for one year after shipment.
- **Storage Buffer:** PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
- **Aliquoting is unnecessary for -20°C storage**

---

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 14295-1-AP (NANOG antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.

1x10^6 NCCIT cells were intracellularly stained with 0.2 ug Anti-Human NANOG (14295-1-AP) and Coralite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (green), and 0.2 ug Control Antibody. Cells were fixed with 90% MeOH.

Confocal immunofluorescent analysis of human embryonic stem cells with 14295-1-AP at dilution of 1:200. The PE shows staining with 14295-1-AP/PE. The DAPI shows nuclear staining by DAPI.