

## Recombinant Human NANOG Protein (His Tag)

**Catalog Number:** PDEH100904

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

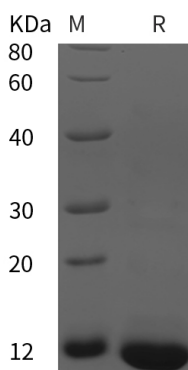
### Description

|                      |   |
|----------------------|---|
| <b>Species</b>       | Human   |
| <b>Source</b>        | E.coli-derived Human NANOG protein Lys94-Ser162, with an N-terminal His |
| <b>Calculated MW</b> | 7.5 kDa   |
| <b>Observed MW</b>   | 12 kDa  |
| <b>Accession</b>     | Q9H9S0  |
| <b>Bio-activity</b>  | Not validated for activity  |

### Properties

|                       |   |
|-----------------------|---|
| <b>Purity</b>         | > 95% as determined by reducing SDS-PAGE.   |
| <b>Endotoxin</b>      | < 10 EU/mg of the protein as determined by the LAL method   |
| <b>Storage</b>        | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months. |
| <b>Shipping</b>       | This product is provided as lyophilized powder which is shipped with ice packs.   |
| <b>Formulation</b>    | Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.   |
| <b>Reconstitution</b> | It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.  |

### Data



SDS-PAGE analysis of Human NANOG proteins, 2 µg/lane of Recombinant Human NANOG proteins was resolved with SDS-PAGE under reducing conditions, showing bands at 12 kDa.

### Background

Transcription regulator involved in inner cell mass and embryonic stem (ES) cells proliferation and self-renewal. Imposes pluripotency on ES cells and prevents their differentiation towards extraembryonic endoderm and trophoblast 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.

### For Research Use Only

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