# **PRODUCT INFORMATION**

**Expression system** E.coli

**Domain** 1-154aa

UniProt No. Q9H9S0

NCBI Accession No. NP\_079141

### Alternative Names

Nanog homeobox, hNanog, Homeobox protein NANOG, Homeobox transcription factor Nanog

# **PRODUCT SPECIFICATION**

#### **Molecular Weight**

19.6 kDa (174aa) confirmed by MALDI-TOF (Molecular weight on SDS-PAGE will appear higher)

#### Concentration

0.25mg/ml (determined by Bradford assay)

#### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 20% glycerol, 1mM DTT

#### Purity

> 90% by SDS-PAGE

**Tag** His-Tag

Application SDS-PAGE

#### **Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

### BACKGROUND

## Description

NANOG, also known as nanog homeobox, is a member of the homeobox family of DNA binding transcription factors that has been shown to maintain pluripotency of embryonic stem cells. Nanog expression counteracts the differentiation-promoting signals induced by the extrinsic factors LIF, Stat3 and BMP. Once NANOG expression is down-regulated, cell differentiation can proceed. Recombinant human NANOG protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography.



#### **Amino acid Sequence**

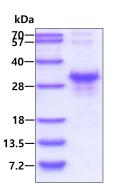
<MGSSHHHHHH SSGLVPRGSH> MSVDPACPQS LPCFEASDCK ESSPMPVICG PEENYPSLQM SSAEMPHTET VSPLPSSMDL LIQDSPDSST SPKGKQPTSA EKSVAKKEDK VPVKKQKTRT VFSSTQLCVL NDRFQRQKYL SLQQMQELSN ILNLSYKQVK TWFQNQRMKS KRWQ

#### **General References**

Clark A T., et al. (2004) Stem Cells. 22:169-179. Chambers I., et al. (2003) Cell Res. 13:499-502.

## DATA

#### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.