

**RPJ992Hu01 1mg**

**Recombinant NANOG Homeobox Protein (NANOG)**

**Organism Species: *Homo sapiens (Human)***

***Instruction manual***

FOR RESEARCH USE ONLY

NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

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13th Edition (Revised in Aug, 2023)

## **[ PROPERTIES ]**

**Source:** Prokaryotic expression

**Host:** *E.coli*

**Residues:** Met1~Val305

**Tags:** N-terminal His and GST Tag

**Subcellular Location:** Nucleus

**Purity:** > 80%

**Traits:** Freeze-dried powder

**Buffer formulation:** PBS, pH7.4, containing 0.01% Sarcosyl, 5% Trehalose.

**Original Concentration:** 150µg/mL

**Applications:** Positive Control; Immunogen; SDS-PAGE; WB.

(May be suitable for use in other assays to be determined by the end user.)

**Predicted isoelectric point:** 6.3

**Predicted Molecular Mass:** 64.6kDa

**Accurate Molecular Mass:** 75kDa as determined by SDS-PAGE reducing conditions.

### **Phenomenon explanation:**

The possible reasons that the actual band size differs from the predicted are as follows:

1. Splice variants: Alternative splicing may create different sized proteins from the same gene.
2. Relative charge: The composition of amino acids may affect the charge of the protein.
3. Post-translational modification: Phosphorylation, glycosylation, methylation etc.
4. Post-translation cleavage: Many proteins are synthesized as pro-proteins, and then cleaved to give the active form.
5. Polymerization of the target protein: Dimerization, multimerization etc.

## **[ USAGE ]**

Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

## **[ STORAGE AND STABILITY ]**

**Storage:** Avoid repeated freeze/thaw cycles.

Store at 2-8°C for one month.

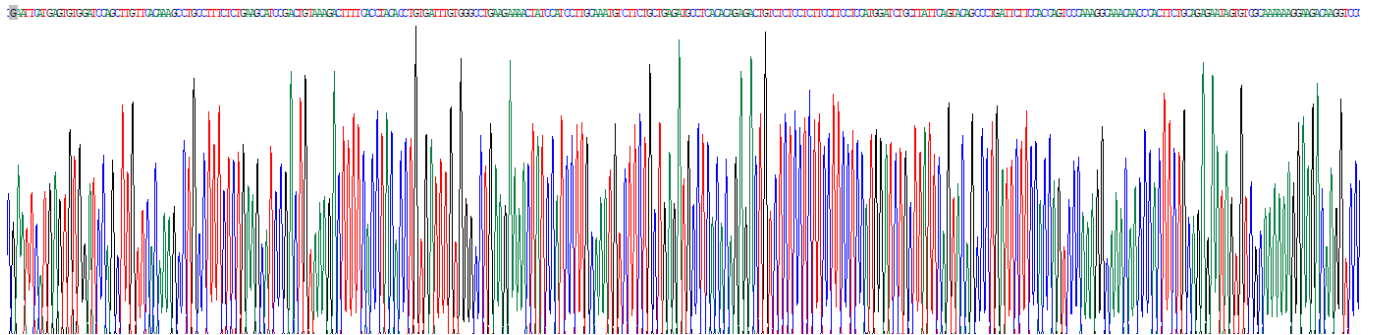
Aliquot and store at -80°C for 12 months.

**Stability Test:** The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

**[ SEQUENCE ]**

```
MSVDPACPQS  LPCFEASDCK  ESSPMPVICG  PEENYPQLQM  SSAEMPHLET
VSPLPSSMDL  LIQDSPDSST  SPKKGKQPTSA  EKSVAKKEDK  VPVKKQKTRT
VFSSTQLCVL  NDRFQRQKYL  SLQQMQELSN  ILNLSYKQVK  TWFQNQRMKS
KRWQKNNWPK  NSNGVTQKAS  APTYPSLYSS  YHQGCLVNPT  GNLPMWSNQT
WNNSTWSNQT  QNIQSWSNHS  WNTQTWCTQS  WNNQAWNSPF  YNCGEESLQS
CMQFQPNSPA  SDLEAALEAA  GEGLNVIQQT  TRYFSTPQTM  DLFLNYSMMN
QPEDV
```

**[ IDENTIFICATION ]**



**Figure . Gene Sequencing (extract)**

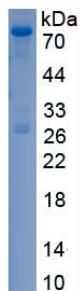


Figure. SDS-PAGE

**[ IMPORTANT NOTE ]**

The kit is designed for research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.