

# **Recombinant Human Nanog-TAT**

Catalog # PBG10327

## Specification

### **Recombinant Human Nanog-TAT - Product Information**

## **Recombinant Human Nanog-TAT - Additional Information**

### **Description**

Nanog is a regulatory protein that is associated with undifferentiated pluripotent cells. The expression of Nanog, which is suppressed in all adult tissues, is restricted to embryonic stem cells and to certain pluripotent cancer cells. Decreased expression of Nanog is strongly correlated with cell differentiation. Nanog, most likely, acts as an intracellular regulator, which helps maintain pluripotency and self renewal via a STAT3 independent pathway. The introduction of Nanog, along with Sox2, Oct4, Lin28, into primary human fibroblasts was sufficient to confer a pluripotent state upon the fibroblast genome. The reprogrammed cells thus obtained resemble ESC in morphology and gene expression. Protein transduction using TAT fusion proteins represents an alternative methodology for introducing transcription factors into primary as well as transformed cells. Recombinant human Nanog-TAT is a 36.2 kDa protein, which is synthesized as a 304 amino acid polypeptide plus a 13- residue C-terminal TAT peptide.

### **Biological**Activity

Testing in progress.

#### **Authenticity**

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

#### Endotoxin

Endotoxin level is <0.1 ng/  $\mu g$  of protein ( $<1EU/ \mu g$ ).

### **Protein Content**

Verified by UV Spectroscopy and/or SDS-PAGE gel.

## **Storage**

-20°C

## **Precautions**

Recombinant Human Nanog-TAT is for research use only and not for use in diagnostic or therapeutic procedures.

## **Recombinant Human Nanog-TAT - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry





- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

**Recombinant Human Nanog-TAT - Images**