



# Recombinant Human Nanog-TAT

20150227BB



**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

<b>Cat.-no.:</b>	<b>100-110</b>
<b>Size:</b>	20 µg
<b>Lot. No.:</b>	According to product label

### Sequence

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SVDPAC PQS  L P C F E A S D C K  E S S P M P V I C G  P E E N Y P S L Q M
S S A E M P H T E T  V S P L P S S M D L  L I Q D S P D S S T  S P K G K Q P T S A
E N S V A K K E D K  V P V K K Q K T R T  V F S S T Q L C V L  N D R F Q R Q K Y L
S L Q Q M Q E L S N  I L N L S Y K Q V K  T W F Q N Q R M K S  K R W Q K N N W P K
N S N G V T Q K A S  A P T Y P S L Y S S  Y H Q G C L V N P T  G N L P M W S N Q T
W N N S T W S N Q T  Q N I Q S W S N H S  W N T Q T W C T Q S  W N N Q A W N S P F
Y N C G E E S L Q S  C M Q F Q P N S P A  S D L E A A L E A A  G E G L N V I Q Q T
T R Y F S T P Q T M  D L F L N Y S M N M  Q P E D V G G Y G R  K K R R Q R R R
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## Scientific Background

<b>Gene-ID (NCBI):</b>	79923
<b>Synonyms:</b>	Nanog-TAT

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, that helps maintain pluripotency and self renewal via a STAT3-independent pathway. The introduction of nanog, along with Sox2, Oct4, and 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 36.1 kDa protein, which is synthesized as a 304 amino acid polypeptide plus a 13-residue C-terminal TAT peptide.

### Database References

<b>Protein RefSeq:</b>	NP_079141.2
<b>Uniprot ID:</b>	Q9H9S0
<b>mRNA RefSeq:</b>	NM_024865

## Product Specifications

<b>Expressed in</b>	E. coli
<b>Purity</b>	> 95% by SDS-PAGE & HPLC analyses
<b>Tag</b>	TAT-Fusion protein
<b>Endotoxin level</b>	< 0.1 ng /µg of protein (<1EU/µg).
<b>Formulation</b>	lyophilized
<b>Length (aa):</b>	304
<b>MW:</b>	36.2 kDa

**Biological Activity:** Testing in progress.



**AVOID REPEATED FREEZE AND THAW CYCLES!**