Nanog-TAT Human E. coli

Product Data Sheet

Type: Recombinant
Source: E. coli
Species: Human
Other names: ,

Cat. No.:

RBG10241005	(5 µg)
RBG10241020	(20 µg)
RBG10241100	(100 µg)

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, 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.

Research topic

Others

Amino Acid Sequence

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MSVDPACPQS LPCFEASDCK ESSPMPVICG PEENYPSLQM SSAEMPHTET VSPLPSSMDL LIQDSPDSST SPKGKQPTSA
ENSVAKKEDK VPVKKQKTRT VFSSTQLCVL NDRFQRQKYL SLQQMQELSN ILNLSYKQVK TWFQNQRMKS KRWQKNNWPK
NSNGVTQKAS APTYPSLYSS YHQGCLVNPT GNLPMWSNQT WNNSTWSNQT QNIQSWSNHS WNTQTWCTQS WNNQAWNSPF
YNCGEESLQS CMQFQPNSPA SDLEAALEAA GEGLNVIQQT TRYFSTPQTM DLFLNYSMNM QPEDVGGYGR KKRRQRRR
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Source

E. coli

Purity

95%

Biological Activity

Data not available.

Endotoxin

Endotoxin level is <0.1 ng/µg of protein (<1EU/µg).

Reconstitution

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at-20°C to -80°C.

Storage, Stability/Shelf Life

-20°C

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