

TECHNICAL DATA SHEET

Recombinant Human Nanog-TAT (Carrier-Free)

Catalog Number: 21-9079

RPx-Pro™ Recombinant Protein

PRODUCT INFORMATION

CONTENTS

Recombinant Human Nanog-TAT (Carrier-Free)

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.

MOLECULAR MASS

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.

AMINO ACID SEQUENCE

SVDPACPQSL PCFEASDCKE SSPMPVICGP EENYPQLQMS SAEMPHTETV SPLPSSMDLL IQDSPDSSTS PKGKQPTSAE NSVAKKEDKV PVKKQKTRTV FSSTQLCVLN DRFQRQKYL S LQQMQELSN LNL SYKQVKT W FQNQRMKSK RWQKNNWPKN SNGVTQKASA PTYPSLYSSY HGGCLVNPTG NLP MWSNQTW NNSTWSNQTQ NIQSWSNHSW NTQTWCTQSW NNQAWNSPFY NCGEESLQSC MQFQPNSPAS DLEAAL E AAG EGLNVIQQT RYFSTPQTMD LFLNYSMMNQ PEDVGGYGRK KRRQRRR

SOURCE

E.coli

APPLICATIONS

Bioassay

PURITY

95 %

STORAGE

-20°C

PROTEIN CONTENT

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

ENDOTOXIN LEVEL

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

AUTHENTICITY

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

CROSS REACTIVITY

BIOACTIVITY

Data not available at this time.

RESEARCH AREAS

Stem Cells & Differentiation

RECONSTITUTION

See Certificate of Analysis (COA) for lot specific reconstitution information.

REFERENCES

Rahn S, Zimmermann V, Viol F, Knaack H, Stemmer K, Peters L, Lenk L, Ungefroren H, Saur D, Schäfer H, Helm O, Sebens S. *Cancer Lett.* 2017 Dec 5. pii: S0304-3835(17)30770-X. doi: 10.1016/j.canlet.2017.12.004. Wang H, Zhang K, Liu Y, Fu Y, Gao S, Gong P, Wang H, Zhou Z, Zeng M, Wu Z, Sun Y, Chen T, Li S, Liu L. *BMC Biol.* 2017 Dec 8;15(1):114. doi: 10.1186/s12915-017-0453-8.

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