

**TECHNICAL DATA SHEET**

**Recombinant Human Nanog (Carrier-Free)**

Catalog Number: 21-9077

**RPx-Pro™ Recombinant Protein**  
**PRODUCT INFORMATION**

**CONTENTS**

Recombinant Human Nanog (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.

**MOLECULAR MASS**

Recombinant Human Nanog is a 34.7 kDa protein, which is synthesized as a 304 amino acid polypeptide lacking a signal sequence for secretion.

**AMINO ACID SEQUENCE**

SVDPACPQSL PCFEASDCKE SSPMPVICGP EENYPQLQMS SAEMPHETV SPLPSSMDLL IQDSPDSSTS PKGKQPTSAE NSVAKKEDKV PVKKQKTRTV FSSTQLCVLN DRFQRQKYL LQQMQELSN LNSYKQVKT WFNQRMKSK RWQKNNWPKN SNGVTQKASA PTYPSLYSSY HQGCLVNPTG NLPMWSNQTW NNSTWSNQTQ NIQSWSNHSW NTQTWCTQSW NNQAWNPFY NCGEESLQSC MQFQPNPAS DLEAALEAAG EGLNVIQTT RYFSTPQTMD LFLNYSMMQ PEDV

**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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