

Nanog, human recombinant

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| CATALOG #: | 7176-10 | 10 µg |
| | 7176-50 | 50 µg |
| ALTERNATE NAMES: | Homeobox transcription factor Nanog | |
| SOURCE: | E. Coli | |
| PURITY: | ≥ 98% by SDS-PAGE gel and HPLC analyses | |
| MOL. WEIGHT: | 34.7 kDa | |
| ENDOTOXIN LEVEL: | < 0.1 ng/µg of protein (<1EU/µg). | |
| FORM: | Lyophilized | |
| FORMULATION: | Sterile filtered through a 0.2 micron filter. Lyophilized from 10 mM Acetic acid. | |
| STORAGE CONDITIONS: | Store at -20°C. After reconstitution, aliquot and store at -20°C to -80°C. Avoid repeated freezing and thawing cycles. | |

RECONSTITUTION:

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 week. 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.

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 maintains pluripotency and self-renewal via a STAT3 independent pathway. 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 EENYPSLQMS SAEMPHTETV
SPLPSSMDLL IQDSPDSSTS PKGKQPTSAE NSVAKKEDKV PVKKQKTRTV
FSSTQLCVLN DRFQRQKYLS LQQMQELSNI LNLSYKQVKT WFQNQRMSK
RWQKNNWPKN SNGVTQKASA PTYPSLYSSY HQGCLVNPTG NLPMWSNQTW
NNSTWSNQTQ NIQSWSNHSW NTQTWCTQSW NNQAWNPFY NCGEESLQSC
MQFQPNPAS DLEAALEAAG EGLNVIQTT RYFSTPQTMD LFLNYSMMMQ PEDV

RELATED PRODUCTS:

- Nanog-TAT, human recombinant (Cat # 7177-10, -50)
- Nanog Antibody (Cat # 3165-100)

FOR RESEARCH USE ONLY! Not to be used in humans.