Product datasheet

Recombinant Human Nanog protein ab50053

Overview

Product name: Recombinant Human Nanog protein
Protein length: Full length protein

Description

Nature: Recombinant
Source: Escherichia coli
Species: Human
Sequence:
SVDPACPQSL PCFEASDCKE SSPMPVIGCP EENYPSLQMS SAEMPHETEV SPLPSSMDLL IQDSPDSSTS PKGKOPTSAE NSVAKKEDKV PVKKQKTRTV FSSTQLCVLN DRFQRQKYLQ LQQMQELSNI LNLSYQKQVT WFQNQRMKSK RWQKNWPKN SNGVTQKASA PTYPILYSSY HQGCLVNPTG NLPMWNSQTW NNSTWSNQTQ NQSWSNHSW NTQTWCPTQSWN NQA&WNSPFY NCGEESLQSC MQFQPNSPAS DLEAALEAAG EGLNVIQQTTRYFSTPQTMD EFLNYSMNMQ PEDV

Molecular weight: 35 kDa
Amino acids: 1 to 304

Specifications

Our Abpromise guarantee covers the use of ab50053 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications: SDS-PAGE
Endotoxin level: < 0.100 Eu/µg
Purity: > 95 % SDS-PAGE.
Form: Lyophilised
Additional notes: Endotoxin level is less than 0.1 ng per µg (1EU/µg).
**Preparation and Storage**

**Stability and Storage**
Shipped at 4°C. The lyophilized protein is stable for a few weeks at room temperature. Store at -20°C long term.
Preservative: None
Endotoxin level is less than 0.1 ng per µg (1EU/µg).

**Reconstitution**
Reconstitute to 1mg/ml using 10mM Acetic acid.

**General Info**

**Function**
Transcription regulator involved in inner cell mass and embryonic stem (ES) cells proliferation and self-renewal. Imposes pluripotency on ES cells and prevents their differentiation towards extraembryonic endoderm and trophectoderm lineages. Blocks bone morphogenetic protein-induced mesoderm differentiation of ES cells by physically interacting with SMAD1 and interfering with the recruitment of coactivators to the active SMAD transcriptional complexes (By similarity). Acts as a transcriptional activator or repressor (By similarity). Binds optimally to the DNA consensus sequence 5'-TAAT[GT][GT]-3' or 5'-[CG][GA][CG][GC]ATTAN[GC]-3' (By similarity). When overexpressed, promotes cells to enter into S phase and proliferation.

**Tissue specificity**
Expressed in testicular carcinoma and derived germ cell tumors (at protein level). Expressed in fetal gonads, ovary and testis. Also expressed in ovary teratocarcinoma cell line and testicular embryonic carcinoma. Not expressed in many somatic organs and oocytes.

**Sequence similarities**
Belongs to the Nanog homeobox family.
Contains 1 homeobox DNA-binding domain.

**Developmental stage**
Expressed in embryonic stem (ES) and carcinoma (EC) cells. Expressed in inner cell mass (ICM) of the blastocyst and gonocytes between 14 and 19 weeks of gestation (at protein level). Not expressed in oocytes, unfertilized oocytes, 2-16 cell embryos and early morula (at protein level). Expressed in embryonic stem cells (ES). Expression decreases with ES differentiation.

**Cellular localization**
Nucleus.

**Images**

Standard Curve for Nanog (Analyte: Nanog protein (ab50053)); dilution range 1 pg/ml to 1 ug/ml using Capture Antibody Mouse monoclonal [1E6C4] to Nanog (ab76586) at 0.2 ug/ml and Detector Antibody Rabbit polyclonal to Nanog - ChiP Grade (ab21624) at 0.5 ug/ml.
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- Response to your inquiry within 24 hours
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- Extensive multi-media technical resources to help you
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