

Product datasheet

Recombinant Human Nanog protein ab50053

[2 References](#) [1 Image](#)

Description

Product name	Recombinant Human Nanog protein
Purity	> 95 % SDS-PAGE.
Endotoxin level	< 0.100 Eu/μg
Expression system	Escherichia coli
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	<pre>SVDPACPQSL PCFEASDCKE SSPMPVICGP EENYPQLQMS SAEMPHTE TV SPLPSSMDLL IQDSPDSSTS PKGKQPTSAE NSVAKKEDKV PVKKQKTRTV FSSTQLCVLN DRFQRQKYL LQQMQELSNLNL SYKQVKT WFQNQRMKSK RWQKNNWPKN SNGVTQKASA PTYPSLYSSY HQGCLVNPTG NLP MWSNQTW NNSTWSNQTQ NIQSWSNHSW NTQTWCTQSW NNQAWNSPFY NCGEESLQSC MQFQPNPAS DLEAALEAAG EGLNVIQTT RYFSTPQTMD LFLNYSMMMQ PEDV</pre>
Predicted 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
Form	Lyophilized
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.

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]C[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.

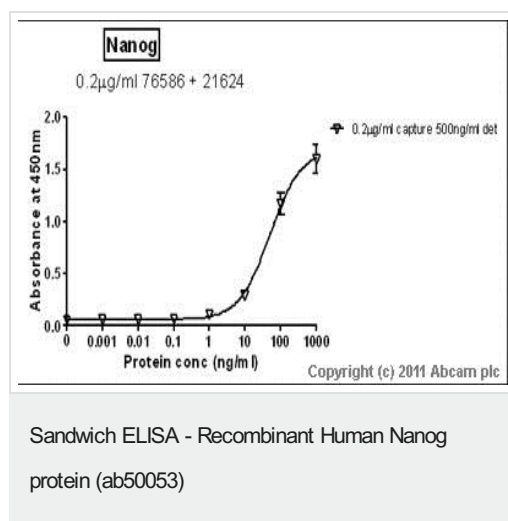
Developmental stage

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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