

Product datasheet

Recombinant Human Nanog protein ab245793

Description

Product name	Recombinant Human Nanog protein
Purity	> 95 % SDS-PAGE. Greater than 95% by HPLC analyses.
Expression system	Escherichia coli
Accession	<u>Q9H9S0</u>
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	SVDPACPQSLPCFEASDCKESSMPVICGPEENYPQLQ MSSAEMPHTEV SPLPSSMDLLIQDSPDSSSTSPKKGKQPTSAENSVAKKEDK VPVKKQKTRTV FSSTQLCVLNDRFQRQKYLSQLQMQELSNILNLSYKQVKT WFQNQRMKSK RWQKNNWPKNNGVTQKASAPTYPSTLYSSYHQGLVNP TGNLPMWSNQTW NNSTWSNQTQNIQSWSNHSWNTQTWCTQSWNNQAWNS PFYNCGEESLQSC MQFQPNSPASDLEAALEAAGEGLNVIQQTTRYFSTPQTM DLFLNYSMMNQ PEDVGGYGRKKRRQRRR
Predicted molecular weight	36 kDa
Amino acids	2 to 305
Additional sequence information	Plus a 13-residue C-terminal TAT peptide.

Specifications

Our **Abpromise guarantee** covers the use of **ab245793** 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 HPLC
Form	Lyophilized

Preparation and Storage

Stability and Storage	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle. Constituents: 0.58% Sodium chloride, 0.15% Sodium citrate
Reconstitution	Reconstitute in water to 0.1 - 1.0 mg/ml.

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 trophoblast 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.

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