

Product datasheet

Recombinant human Nanog protein ab134886

Description

Product name	Recombinant human Nanog protein	
Biological activity	DNA binding activity was demonstrated with ELISA using NANOG specific DNA binding oligo.	
Purity	<p>> 90 % SDS-PAGE.</p> <p>ab134886 was expressed in E. coli as inclusion bodies, refolded using "temperature shift inclusion body refolding" technology, chromatographically purified and sterile-filtered.</p>	
Expression system	Escherichia coli	
Accession	Q9H9S0	
Protein length	Full length protein	
Animal free	No	
Nature	Recombinant	
Species	Human	
Sequence	<p>GSVDPACPQSLPCFEASDCKESSPMPVICGPEENYP QMSSAEMPHET VSPLPSSMDLLIQDSPDSSTSPKGGKQPTSAEKSVAKKED KVPVKKQKTRT VFSSTQLCVLNDRFQRQKYLSQLQMQELSNILNLSYKQVK TWFQNQRMKS KRWQKNNWPKNSNGVTQKASAPTYP SLYSSYHQGCLVN PTGNLPMWSNQT WNNSTWSNQTQNIQSWNSHWSNTQTWCTQSWNNQAWN SPFYNCGEESLQS CMQFQPNSPASDLEAALEAAGEGLNVIQQTTRYFSTPQT MDLFLNYSMMN QPEDVESGGGGSPGRRRRRRRRRRR</p>	
Predicted molecular weight	37 kDa including tags	
Amino acids	2 to 305	

Specifications

Our [Abpromise guarantee](#) covers the use of **ab134886** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Functional Studies
	SDS-PAGE

Form Liquid

Preparation and Storage

Stability and Storage Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
pH: 8.00
Constituents: Potassium chloride, 0.05% DTT, 0.32% Tris HCl, 0.02% EDTA, Glycerol, Sodium chloride, 3.4% DL-Arginine
This product is an active protein and may elicit a biological response in vivo, handle with caution.

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.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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