

Datasheet for ABIN7564307 Nanog Protein (AA 1-305) (His tag)



Overview

Quantity:	1 mg
Target:	Nanog (NANOG)
Protein Characteristics:	AA 1-305
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Nanog protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details	
Purpose:	Custom-made recombinat Nanog Protein expressed in mammalien cells.
Sequence:	MSVGLPGPHS LPSSEEASNS GNASSMPAVF HPENYSCLQG SATEMLCTEA ASPRPSSEDL
	PLQGSPDSST SPKQKLSSPE ADKGPEEEEN KVLARKQKMR TVFSQAQLCA LKDRFQKQKY
	LSLQQMQELS SILNLSYKQV KTWFQNQRMK CKRWQKNQWL KTSNGLIQKG SAPVEYPSIH
	CSYPQGYLVN ASGSLSMWGS QTWTNPTWSS QTWTNPTWNN QTWTNPTWSS
	QAWTAQSWNG QPWNAAPLHN FGEDFLQPYV QLQQNFSASD LEVNLEATRE SHAHFSTPQA
	LELFLNYSVT PPGEI Sequence without tag. The proposed Purification-Tag is based on
	experiences with the expression system, a different complexity of the protein could make
	another tag necessary. In case you have a special request, please contact us.
Characteristics:	Key Benefits:
	Made to order protein - from design to production - by highly experienced protein experts.

- · Protein expressed in mammalien cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

Grade:

custom-made

Target Details

Target:	Nanog (NANOG)
Alternative Name:	Nanog (NANOG Products)

Background:

Homeobox protein NANOG (ES cell-associated protein 4) (Early embryo specific expression NK-type homeobox protein) (Homeobox transcription factor Nanog),FUNCTION: Transcription regulator involved in inner cell mass and embryonic stem (ES) cells proliferation and self-renewal (PubMed:25825768). 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. Acts as a transcriptional activator or repressor. Binds optimally to the DNA consensus sequence 5'-TAAT[GT][GT]-3' or 5'-[CG][GA][CG]C[GC]ATTAN[GC]-3'. Binds to the POU5F1/OCT4 promoter (By similarity). Able to autorepress its expression in differentiating (ES) cells: binds to its own promoter following interaction with ZNF281/ZFP281, leading to recruitment of the NuRD complex and subsequent repression of expression. When overexpressed, promotes cells to enter into S phase and proliferation.

{ECO:0000250|UniProtKB:Q9H9S0, ECO:0000269|PubMed:12787504, ECO:0000269|PubMed:12787505, ECO:0000269|PubMed:14728807,

Target Details

Expiry Date:

12 months

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	ECO:0000269 PubMed:15502159, ECO:0000269 PubMed:16518401,
	ECO:0000269 PubMed:16791199, ECO:0000269 PubMed:16801560,
	ECO:0000269 PubMed:21915945, ECO:0000269 PubMed:22988117,
	ECO:0000269 PubMed:25825768}.
Molecular Weight:	34.2 kDa
UniProt:	Q80Z64
Pathways:	Stem Cell Maintenance
Application Details	
Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies
	as well. As the protein has not been tested for functional studies yet we cannot offer a
	guarantee though.
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.