



Recombinant Human Homeobox protein NANOG (NANOG)

Product Code	CSB-YP888008HU
Relevance	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 trophoctoderm 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'. 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.
Abbreviation	Recombinant Human NANOG protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q9H9S0
Alias	Homeobox transcription factor Nanog Short name: hNanog
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MSVDPACPQSLPCFEASDCKESSMPVICGPEENYPQLQMSSAEMPHTETVS PLPSSMDLLIQDSPDSSTSPKGGKQPTSAEKSVAKKEDKVPVKKQKTRTVFSST QLCVLNDRFQRQKYLSQLQMQELSNILNLSYKQVKTWFQNRMRMSKRWQKN NWPKNNSNGVTQKASAPTYPSLYSSYHQGCLVNPTGNLPMWSNQTWNNSTW SNQTQNIQSWNSHWNQTWCTQSWNNQAWNSPFYNCGEESLQSCMQFQ PNSPASDLEAALEAAGEGLNVIQQTTRYFSTPQTMDLFLNYSNMNMQPEDV
Research Area	Cancer
Source	Yeast
Target Names	NANOG
Protein Names	Recommended name: Homeobox protein NANOG Alternative name(s): Homeobox transcription factor Nanog Short name= hNanog
Expression Region	1-305aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at



4°C for up to one week.

Tag Info

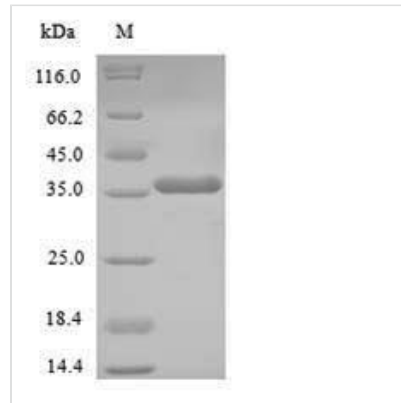
N-terminal 6xHis-tagged

Mol. Weight

36.6kDa

Protein Length

Full Length

Image


(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.