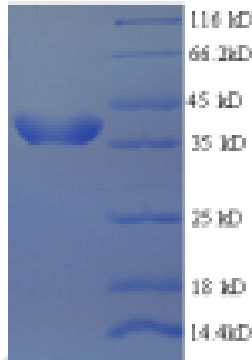




Recombinant Human Homeobox protein NANOG(NANOG)

Catalog Number: CSB-YP888008HU

Product Name:	Recombinant Human Homeobox protein NANOG(NANOG)
Alternative names:	Homeobox transcription factor Nanog
Catalog Number:	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][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.
Mol. Weight:	36kD
Product Info :	His-tagged
Source:	Yeast derived
Images	
Purity:	>90%(SDS-PAGE)
Storage Buffer:	20mM Tris-HCl, 0.5M NaCl, PH 8.0,50% glycerol
Storage :	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Notes :	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
AA sequence:	MSVDPACPQSLPCFEASDCKESSPMPVICGPEENYPQLQMSSAEMPHTETVSPLPSSMDLLIQ DSPDSSTSPKGKQPTSAEKSVAKKEDKVPVKKQKTRTVFSSTQLCVLNDRFQRQKYLSQLQMQ ELSNILNLSYKQVKTWFQNRMKSKRWQKNNWPKNSNGVTQKASAPTYPSTLYSSYHQGCLVN PTGNLPMWSNQTWNNSTWSNQTQNIQSWSNHSWNTQTWCTQSWNNQAWNPFYNCGEES LQSCMQFQPNPASPDLAALAAAGEGLNVIQQTTRYFSTPQTMDFLNYSMMMQPEDV
References:	"The homeoprotein Nanog is required for maintenance of pluripotency in mouse epiblast and ES cells." Mitsui K., Tokuzawa Y., Itoh H., Segawa K., Murakami M., Takahashi K., Maruyama M., Maeda M., Yamanaka S. Cell 113:631-642(2003)