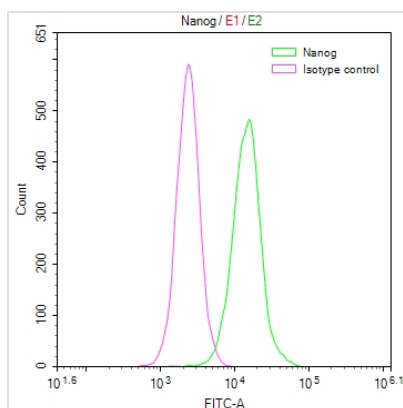




NANOG Recombinant Monoclonal Antibody

Product Code	CSB-RA032801A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	Q9H9S0
Immunogen	A synthesized peptide derived from Human NANOG
Species Reactivity	Human
Tested Applications	ELISA, FC; Recommended dilution: FC:1:50-1:200
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Epigenetics and Nuclear Signaling;Cancer;Developmental biology;Stem cells
Gene Names	NANOG
Clone No.	2G6

Image



Overlay Peak curve showing HeLa cells stained with CSB-RA032801A0HU (red line) at 1:50. The cells were fixed in 4% formaldehyde and permeated by 0.2% TritonX-100. Then 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (1µg/1*10⁶cells) for 45min at 4?. The secondary antibody used was FITC-conjugated Goat Anti-rabbit IgG(H+L) at 1:200 dilution for 35min at 4?. Control antibody (green line) was rabbit IgG (1µg/1*10⁶cells) used under the same conditions. Acquisition of >10,000 events was performed.

Description

In the production of the NANOG recombinant monoclonal antibody, in vitro expression systems are employed, involving the cloning of NANOG antibody DNA sequences from immunoreactive rabbits. The immunogen used is a synthesized peptide derived from the human NANOG protein. Subsequently, the NANOG antibody genes are inserted into plasmid vectors, and these recombinant plasmid vectors are transfected into host cells to enable antibody expression. Following expression, the NANOG recombinant monoclonal



antibody undergoes affinity-chromatography purification and is thoroughly tested for functionality in ELISA and FC applications, demonstrating its reactivity with the human NANOG protein.

NANOG protein plays a crucial role in regulating pluripotency and self-renewal in stem cells, particularly in ESCs and iPSCs. Its functions are essential for early embryonic development, stem cell maintenance, and cell fate determination.