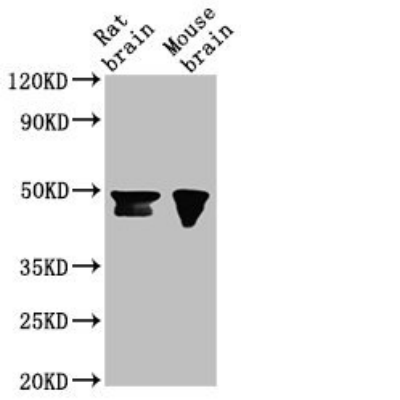
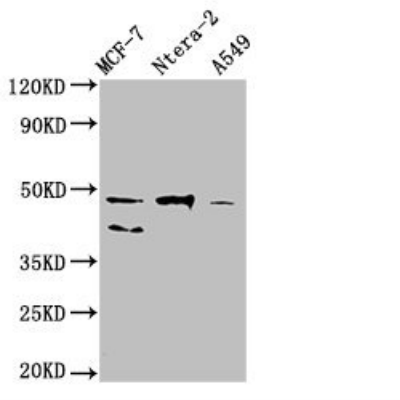
NANOG Monoclonal Antibody

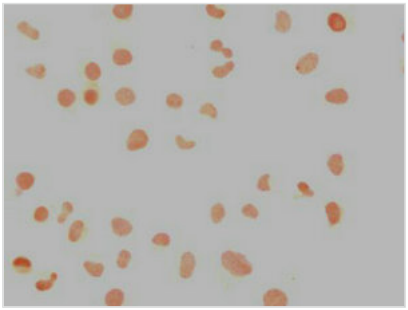
Product Code	CSB-MA888008A0m
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	Q9H9S0
Immunogen	Recombinant Human Homeobox protein NANOG protein (1-305AA)
Raised In	Mouse
Species Reactivity	Human, Mouse, Rat
Tested Applications	ELISA, WB, ICC, IF, FC; Recommended dilution: WB:1:500-1:2000, ICC:1:50-1:500, IF:1:50-1:200
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 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 (PubMed:25825768). 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.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Preservative: 0.03% Proclin 300 Constituents: 50% Glycerol, 0.01M PBS, PH 7.4
Purification Method	>95%, Protein G purified
Isotype	IgG1
Clonality	Monoclonal
Alias	Homeobox protein NANOG (Homeobox transcription factor Nanog) (hNanog), NANOG
Product Type	Monoclonal Antibody
Immunogen Species	Homo sapiens (Human)
Clone No.	8A1D11
Image	



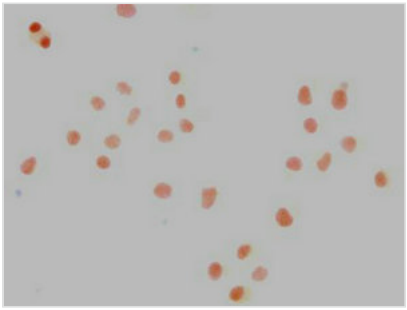
Western Blot
Positive WB detected in: Rat brain tissue, Mouse brain tissue
All lanes: NANOG antibody at 1:500
Secondary
Goat polyclonal to Mouse IgG at 1/10000 dilution
Predicted band size: 35, 33 kDa
Observed band size: 46, 42 kDa



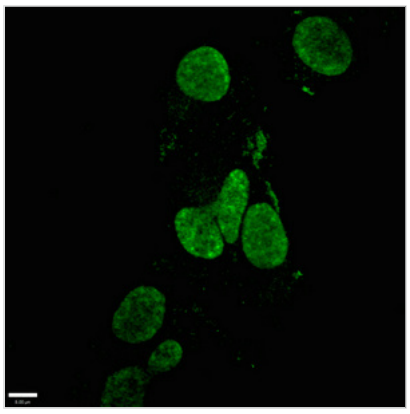
Western Blot
Positive WB detected in: MCF-7 whole cell lysate, Ntera-2 whole cell lysate, A549 whole cell lysate
All lanes: NANOG antibody at 1:500
Secondary
Goat polyclonal to Mouse IgG at 1/10000 dilution
Predicted band size: 35, 33 kDa
Observed band size: 46, 40 kDa



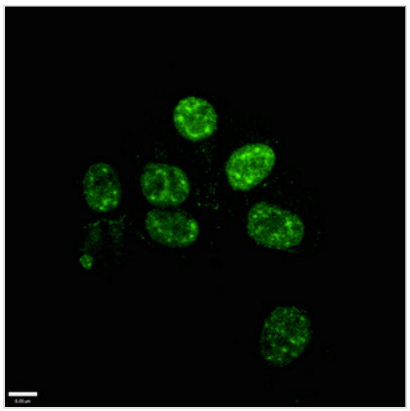
Immunocytochemistry analysis of CSB-MA888008A0m diluted at 1:100 and staining in Hela cells performed on a Leica BondTM system. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



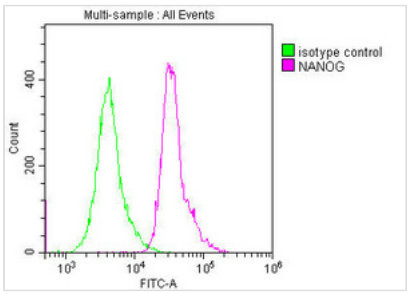
Immunocytochemistry analysis of CSB-MA888008A0m diluted at 1:100 and staining in Ntera-2 cells performed on a Leica BondTM system. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



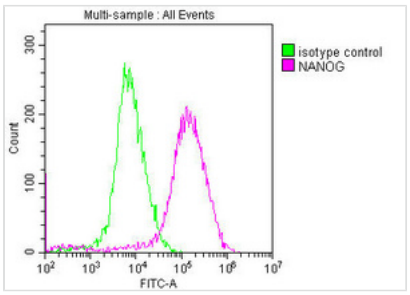
Immunofluorescence staining of Hela cells with CSB-MA888008A0m at 1:100, counter-stained with DAPI. The cells were blocked in 10% normal Goat Serum and then incubated with the primary antibody overnight at 4°C. The secondary antibody was Alexa Fluor 488-congugated AffiniPure Goat Anti-Mouse IgG(H+L).



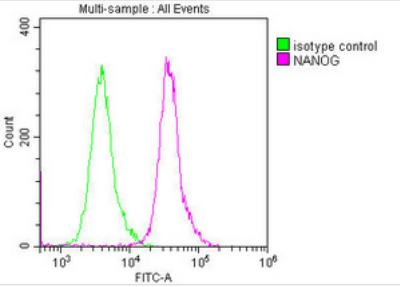
Immunofluorescence staining of Ntera-2 cells with CSB-MA888008A0m at 1:100, counter-stained with DAPI. The cells were blocked in 10% normal Goat Serum and then incubated with the primary antibody overnight at 4°C. The secondary antibody was Alexa Fluor 488-congugated AffiniPure Goat Anti-Mouse IgG(H+L).



Overlay histogram showing Hela cells stained with CSB-MA888008A0m (red line) at 1:250. The cells were incubated in 1x PBS /10% normal goat serum to block non-specific protein-protein interactions followed by primary antibody for 1 h at 4°C. The secondary antibody used was FITC goat anti-mouse IgG(H+L) at 1/200 dilution for 1 h at 4°C. Isotype control antibody (green line) was used under the same conditions. Acquisition of >10,000 events was performed.



Overlay histogram showing MCF-7 cells stained with CSB-MA888008A0m (red line) at 1:250. The cells were incubated in 1x PBS /10% normal goat serum to block non-specific protein-protein interactions followed by primary antibody for 1 h at 4°C. The secondary antibody used was FITC goat anti-mouse IgG(H+L) at 1/200 dilution for 1 h at 4°C. Isotype control antibody (green line) was used under the same conditions. Acquisition of >10,000 events was performed.



Overlay histogram showing Ntera-2 cells stained with CSB-MA888008A0m (red line) at 1:250. The cells were incubated in 1x PBS /10% normal goat serum to block non-specific protein-protein interactions followed by primary antibody for 1 h at 4°C. The secondary antibody used was FITC goat anti-mouse IgG(H+L) at 1/200 dilution for 1 h at 4°C. Isotype control antibody (green line) was used under the same conditions. Acquisition of >10,000 events was performed.