

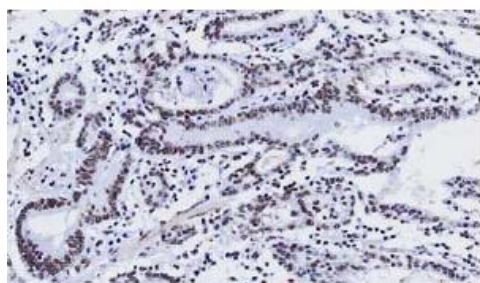
ABM Inc. Antibodies

Quality antibodies are an essential tool in the determination and characterization of iPSC research. Over the years, ABM Inc. has developed over 30,000 quality antibodies at economical prices for life science research. Of all the catalogue antibodies, there is a wide selection of antibodies for iPSC and stem cell research, and all of our antibodies are well-characterized for the applications indicated.

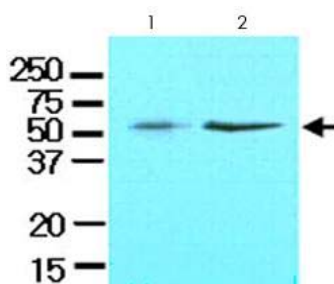
Primary Antibodies

Anti-KLF4 Mouse Antibody

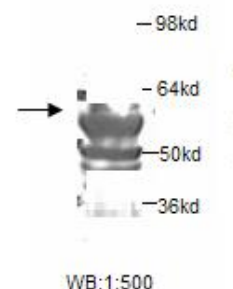
KLF4 is a transcription factor that works with Sp1 to activate the Laminin gamma1 chain gene. It binds the CACCC core sequence. KLF4 may be involved in the differentiation of epithelial cells and may also function in the development of the skeleton and kidney. KLF4 also has roles as both an oncogene and a tumor suppressor.



Paraffin-embedded sections of human gastric cancer tissue were incubated with KLF4 monoclonal antibody (Y030042; 1:50 dilution) for 2 hrs at room temperature. Antigen retrieval was performed in 100mM sodium citrate buffer and detected using Diaminobenzidine (DAB).



Cell lysates of HeLa (lane 1) and A-549 (lane 2, 40µg) were resolved by SDS-PAGE and probed with KLF4 monoclonal antibody (Y030042; 1:100 dilution). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

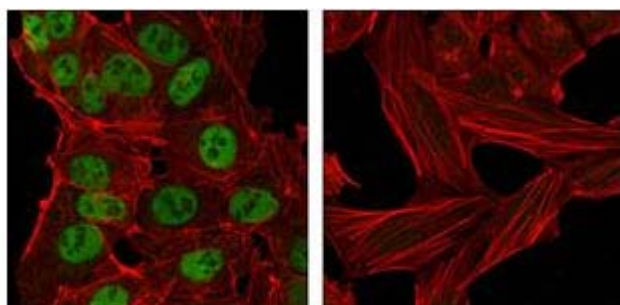


Western Blot analysis of fetal stomach lysates with anti-KLF4 antibody (Y058088). This antibody under reducing conditions, identifies a band of ~55-60KD in fetal stomach lysates.

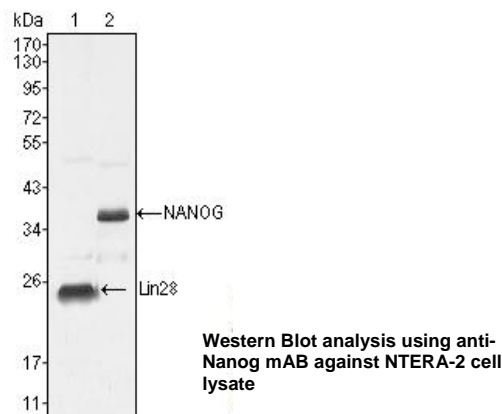
	Monoclonal (Cat No. Y030042)	Polyclonal (Cat No. Y058088)
Packaging	100uL at 100ug/ml	100uL at 1mg/ml
Immunogen	Recombinant human KLF4 (1-170aa) purified from <i>E. coli</i>	Synthetic peptide conjugated to KLH
Species Reactivity	Human, raised in mouse	Human, mus, rattus, raised in rabbit, IgG
Specificity	KLF4	KLF4 antibody detects endogenous levels of KLF4 protein
Purity	Affinity purified	Protein A purified
Applications	WB, ELISA, Immunohistochemistry (paraffin sections)	Peptide ELISA, WB

Anti-Nanog Antibody

Nanog is a member of the homeobox family of DNA binding transcription factors and has been shown to maintain embryonic stem (ES) cell self-renewal independently of leukemia inhibitory factor (LIF)/Stat3. Nanog mRNA is present in pluripotent mouse and human cell lines, and absent from differentiated cells. Functionally, Nanog works together with other key pluripotent factors (Oct4, Sox2, and Lin28) to reprogram human fibroblasts and generate induced pluripotent stem (iPS) cells. These key factors form a regulatory network to support or limit each other's expression level, which maintains the properties of ES cells.



Confocal immunofluorescence analysis of NTERA-2 cells (left) and HeLa cells (right) using anti-Nanog mouse mAb (green). Red: Actin filaments have been labeled with DY-554 phalloidin.

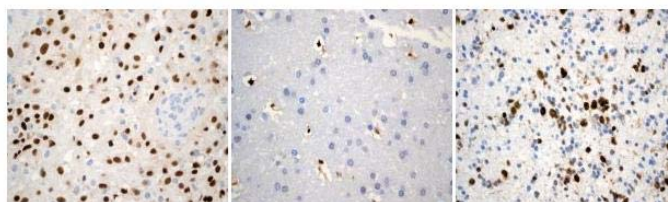
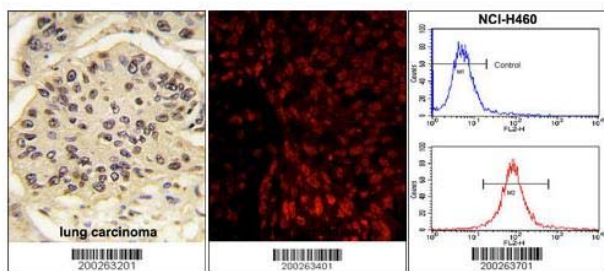


	Monoclonal (Cat No. Y060536)	Polyclonal (Cat No. Y030044)
Packaging	100uL at 1mg/ml	100uL at 1mg/ml
Immunogen	recombinant human Nanog	Fusion protein to NANOG with GST tag purified from <i>E.coli</i>
Species Reactivity	Human, raised in mouse, IgG1	Human, raised in rabbit, IgG
Clonality	NNG-811	N/A
Purity	Purified immunoglobulin	Affinity purified
Applications	WB, IHC, ELISA	Optimal dilutions to be determined by researchers. Positive control found in HESC cells with expected band size of 39kDa

Anti-SOX2 Antibody

SOX2 is a member of the SRY-related HMG-box (SOX) family of transcription factors involved in the regulation of embryonic development and in the determination of cell fate. This protein may act as a transcriptional activator after forming a protein complex with other proteins. Mutations in the SOX2 gene have been associated with bilateral anophthalmia, a severe form of structural eye malformation.

It is required for stem-cell maintenance in the central nervous system, and also regulates gene expression in the stomach. SOX2 is necessary for regulating multiple transcription factors that affect Oct3/4 expression. An essential function of SOX2 is to stabilize embryonic stem cells in a pluripotent state by maintaining the requisite level of Oct3/4 expression.



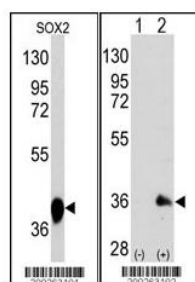
Immunohistochemical analysis using anti-SOX2 rabbit monoclonal antibody on the above paraffin-embedded tissues.

From left to right:
Human Glioma Tissue / Human Adult Brain Tissue / Human Fetal Brain Tissue

(LEFT) Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with SOX2 Monoclonal Antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

(MIDDLE) Immunofluorescence analysis of SOX2 Monoclonal Antibody with paraffin-embedded human lung carcinoma tissue. 0.025 mg/ml primary antibody was followed by PE-conjugated goat anti-mouse IgG (whole molecule). PE emits orange fluorescence.

(RIGHT) Flow cytometric analysis of NCI-H460 cells using SOX2 Monoclonal Antibody (bottom histogram) compared to a negative control cell (top histogram). PE-conjugated goat-anti-mouse secondary antibodies were used for the analysis.

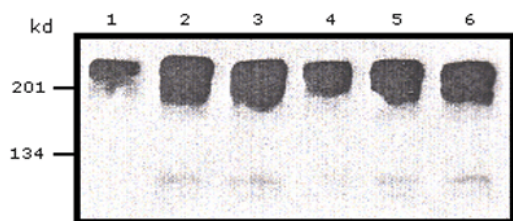


(LEFT) Western blot analysis of anti-SOX2 Monoclonal Antibody by SOX2 recombinant protein. SOX2 (arrow) was detected using the purified Mab.

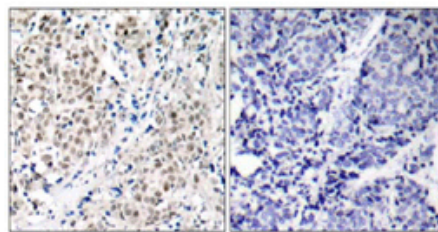
(RIGHT) Western blot analysis of SOX2 (arrow) using mouse monoclonal SOX2 antibody. 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the SOX2 gene (Lane 2).

	Monoclonal (Cat No. Y030048)	Polyclonal (Cat No. Y030049)
Packaging	100uL at 1mg/ml	100uL at 1mg/ml
Immunogen	SOX2 recombinant protein is used to produce this monoclonal antibody	A synthetic peptide corresponding to residues in human SOX2 was used as an immunogen
Species Reactivity	Human, raised in mouse, IgG1	Human, raised in rabbit, IgG1
Clonality	57CT23.3.4	N/A
Purity	Affinity purified	Affinity purified
Applications	WB, IF, IHC, FC, ELISA	WB, IHC, ICC

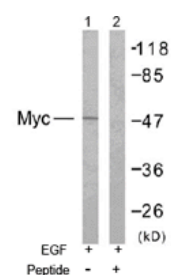
Anti-Myc Tag Antibody



Western Blot analysis of Myc-tagged fusion construct under different transfection conditions of transfection reagents and amount of fusion DNA construct.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using Myc tag polyclonal antibody (Y021035).

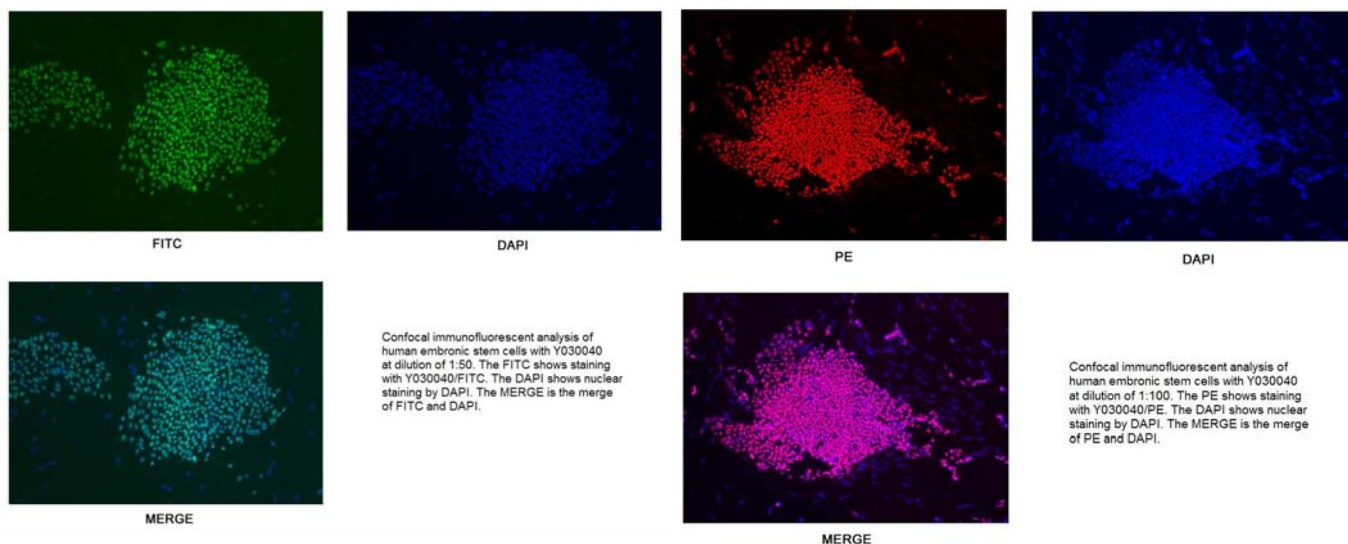


Western Blot analysis of extracts from NIH/3T3 cells using Myc tag polyclonal antibody (Y021035)

	Monoclonal (Cat No. G019)	Polyclonal (Cat No. Y021035)
Packaging	100uL at 1mg/ml	100uL at 1mg/ml
Immunogen	A synthetic peptide corresponding to residues 410-419 (EQKLISEEDL) coupled to KLH.	The antiserum was produced against synthesized non-phosphopeptide derived from human Myc around the phosphorylation site of threonine 358 (R-R-TP-H-N).
Species Reactivity	NA, raised in mouse	Human, Mouse and Rat, raised in rabbit
Specificity	Myc-tag Monoclonal Antibody. Recognises over-expressed proteins containing Myc epitope tag fused to either amino- or carboxy-termini of targeted proteins in transfected mammalian cells.	Myc antibody detects endogenous levels of total Myc protein.
Clonality	Myc.A7	N/A
Purity	Affinity purified	Affinity purified
Applications	WB, IS, IP	WB, IHC

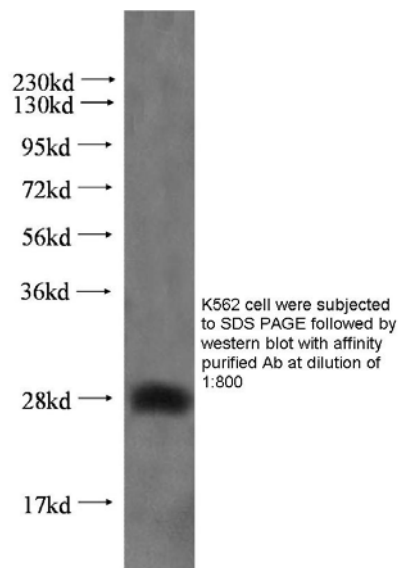
Anti-OCT4 Polyclonal Antibody

Expression of the Oct-4 transcription factor is associated with an undifferentiated phenotype of human and mouse embryonic stem cells and germ cells. Oct-4 (Octamer-4) is a homeodomain transcription factor of the POU family (POU5F1) involved in regulation of pluripotency during normal development and is detectable in embryonic stem (ES) and germ cells. Its expression is associated with an undifferentiated phenotype and tumors. In fact, gene knockdown of Oct4 promotes differentiation, thereby demonstrating a role for this factor in human ES cell self-renewal. As such, it is frequently used as a marker for undifferentiated ES cells or iPS (induced pluripotent stem) cells. Oct4 is one of the four key transcription factors (Oct4, Sox2, c-Myc, and KLF4) used to reprogram mouse and human fibroblasts to a pluripotent state as well as generate patient-specific iPS cells.



Polyclonal (Cat No. Y030040)	
Packaging	100uL at 1mg/ml
Immunogen	Fusion recombinant protein to POU5F1 (alternative symbols: POU5F1;MGC22487;OCT3;OCT4;OTF3;OTF4). C-term-164aa with GST tag, isolated from <i>E. coli</i>
Species Reactivity	Human, Mouse, raised in rabbit, IgG
Specificity	Observed molecular weight of 50kDa. Positive WB controls detected in HESC cell and 293 cell lysate. Positive IHC control detected in colon cancer cells
Purity	Affinity purified
Applications	WB, IHC, ELISA

Anti-LIN28 Polyclonal Antibody



Polyclonal (Cat No. Y055608)	
Packaging	100uL at 1mg/ml
Immunogen	Recombinant Protein
Species Reactivity	Human, raised in rabbit, IgG
Purity	Affinity purified
Applications	WB, ELISA

Secondary Antibodies

Anti-Mouse IgG Antibodies

Product	Host	Packaging Size Concentration	Cat No.
Anti-Mouse IgG AP Conjugated (Affinity purified)	Donkey Goat Rabbit	250µg at 1mg/ml	SA022 SA023 SA024
Anti-Mouse IgG Cy2 Conjugated (Affinity purified)	Donkey	250µg at 1mg/ml	SC011
Anti-Mouse IgG Cy3 Conjugated (Affinity purified)	Donkey Goat	250µg at 1mg/ml	SC022 SC023
Anti-Mouse IgG Cy5 Conjugated (Affinity purified)	Goat	250µg at 1mg/ml	SC012
Anti-Mouse IgG DyLight 488/549/649/680/800 Conjugated (Affinity purified)	Goat	100µg at 1mg/ml	SD009/010/ 004/001/006
Anti-Mouse IgG Fluorescein Conjugated (Affinity purified)	Donkey Goat Rabbit	250µg at 1mg/ml	SF022 SF023 SF024
Anti-Mouse IgG Peroxidase Conjugated (Affinity purified)	Donkey Goat Rabbit	250µg at 1mg/ml	SH022 SH023 SH024
Anti-Mouse IgG IRDye 700DX/800/800CW Conjugated (Affinity purified)	Donkey Goat Rabbit	250µg at 1mg/ml	SI009/024/039 SI008/025/040 SI010/026/041
Anti-Mouse IgG Phycoerythrin Conjugated (Affinity purified)	Goat	250µg at 1mg/ml	SP003
Anti-Mouse IgG Texas Red Conjugated (Affinity purified)	Donkey Goat Rabbit	250µg at 1mg/ml	ST022 ST023 ST024

Anti-Rabbit IgG Antibodies

Product	Host	Packaging Size Concentration	Cat No.
Anti-Rabbit IgG AP Conjugated (Affinity purified)	Donkey Goat	250µg at 1mg/ml	SA025 SA026
Anti-Rabbit IgG Cy2 Conjugated (Affinity purified)	Goat	250µg at 1mg/ml	SC013
Anti-Rabbit IgG Cy3 Conjugated (Affinity purified)	Goat	250µg at 1mg/ml	SC024
Anti-Rabbit IgG Cy5 Conjugated (Affinity purified)	Goat	250µg at 1mg/ml	SC014
Anti-Rabbit IgG DyLight 488/549/649/680/800 Conjugated (Affinity purified)	Goat	100µg at 1mg/ml	SD002/003/ 005/007/008
Anti-Rabbit IgG Fluorescein Conjugated (Affinity purified)	Donkey Goat	250µg at 1mg/ml	SF025 SF026
Anti-Rabbit IgG Peroxidase Conjugated (Affinity purified)	Donkey Goat	250µg at 1mg/ml	SH025 SH026
Anti-Rabbit IgG IRDye 700DX/800/800CW Conjugated (Affinity purified)	Donkey Goat	250µg at 1mg/ml	SI011/027/042 SI012/028/043
Anti-Rabbit IgG Phycoerythrin Conjugated (Affinity purified)	Goat	250µg at 1mg/ml	SP004
Anti-Rabbit IgG Texas Red Conjugated (Affinity purified)	Donkey Goat	250µg at 1mg/ml	ST025 ST026