

Materials List for:

# In vivo Reprogramming of Adult Somatic Cells to Pluripotency by Overexpression of Yamanaka Factors

Açelya Yilmazer<sup>1</sup>, Irene de Lázaro<sup>1</sup>, Cyrill Bussy<sup>1</sup>, Kostas Kostarelos<sup>2</sup>

<sup>1</sup>Nanomedicine Lab, UCL School of Pharmacy, University College London

<sup>2</sup>Nanomedicine Lab, Faculty of Medical & Human Sciences, University of Manchester

Correspondence to: Kostas Kostarelos at [k.kostarelos@ucl.ac.uk](mailto:k.kostarelos@ucl.ac.uk)

URL: <https://www.jove.com/video/50837>

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## Materials

Name	Company	Catalog Number	Comments
pCX-OXS-2A pDNA	Addgene	19771	Obtained from Addgene as bacterial stab, plasmid production performed in Plasmid Factory (Germany)
pCX-cMyc	Addgene	19772	Obtained from Addgene as bacterial stab, plasmid production performed in Plasmid Factory (Germany)
0.22 µm filter	Millipore	SLGP033RS	
Isoflurane	Abbott	B505	
HBSS buffer	Sigma-Aldrich	H6648	Ca <sup>2+</sup> and Mg <sup>2+</sup> free, with bicarbonate
Liver Digest Medium	Gibco	17703-034	
Hepatocyte Wash Medium	Gibco	17704-024	
100 µm cell strainer	BD Biosciences	352360	
Nucleospin RNA II kit	Macherey-Nagel	740955.25	Kit for RNA isolation from cells and tissues
iScript cDNA synthesis kit	Bio-Rad	170-8890	
iO SYBR Green Supermix	Bio-Rad	170-8880	
Oct3/4 forward primer	Sigma	sequence given in comments	TGAGAACCTTCAGGAGATATGCAA
Oct3/4 reverse primer	Sigma	sequence given in comments	CTCAATGCTAGTTCGCTTTCTCTTC
Sox2 forward primer	Sigma	sequence given in comments	GGTTACCTCTTCTCCCACTCCAG
Sox2 reverse primer	Sigma	sequence given in comments	TCACATGTGCGACAGGGGCAG
C-myc forward primer	Sigma	sequence given in comments	CAGAGGAGGAACGAGCTGAAGCGC
C-myc reverse primer	Sigma	sequence given in comments	TTATGCACCAGAGTTTGAAGCTGTTCG
Nanog forward primer	Sigma	sequence given in comments	CAGAAAACCAGTGGTTGAAGACTAG
Nanog reverse primer	Sigma	sequence given in comments	GCAATGGATGCTGGGATACTC
Ecat1 forward primer	Sigma	sequence given in comments	TGTGGGGCCCTGAAAGGCGAGCTGAGAT
Ecat1 reverse primer	Sigma	sequence given in comments	ATGGGCCGCCATACGACGACGCTCAACT
Rex1 forward primer	Sigma	sequence given in comments	ACGAGTGGCAGTTTCTTCTTGGGA
Rex1 reverse primer	Sigma	sequence given in comments	TATGACTCACTTCCAGGGGGCACT
Alb forward primer	Sigma	sequence given in comments	GTTCGCTACACCCAGAAAGC
Alb reverse primer	Sigma	sequence given in comments	CCACACAAGGCAGTCTCTGA
Aat forward primer	Sigma	sequence given in comments	CAGAGGAGGCCAAGAAAGTG
Aat reverse primer	Sigma	sequence given in comments	ATGGACAGTCTGGGGAAGTG
Trf forward primer	Sigma	sequence given in comments	ACCATGTTGTGGTCTCACGA

Trf reverse primer	Sigma	sequence given in comments	ACAGAAGGTCCTTGGTGGTG
B actin forward primer	Sigma	sequence given in comments	GACCTCTATGCCAACACAGT
B actin reverse primer	Sigma	sequence given in comments	AGTACTTGCCTCAGGAGGA
BD Cytifix fixation buffer	BD Biosciences	560585	
1x BD Perm/Wash buffer	BD Biosciences	560585	
anti-mouse OCT4-PerCP-Cy5.5	BD Biosciences	560585	
anti-mouse Nanog-PE	BD Biosciences	560585	
2-Methylbutane	Sigma-Aldrich	M32631	
X100-Triton	Sigma-Aldrich	X100-500ML	
Goat serum	Sigma-Aldrich	G9023	
BSA	Sigma	A2153	
rabbit pAb anti-OCT4	Abcam	ab19857	Use at a concentration of 3 µg/ml
rabbit pAb anti-SOX2	Abcam	ab97959	Use at a concentration of 1 µg/ml
rabbit pAb anti-Nanog	Abcam	ab80892	Use at a concentration of 1 µg/ml
mouse mAb anti-SSEA1	Abcam	ab16285	Use at a concentration of 20 µg/ml
goat pAb anti-rabbit IgG labeled with Cy3	Jackson ImmunoResearch Laboratories Inc.	111-165-003-JIR	Use at a concentration of 1/250
goat pAb anti-mouse IgG labeled with Cy3	Jackson ImmunoResearch Laboratories Inc.	115-165-003-JIR	Use at a concentration of 1/250
VECTASHIELD mounting medium with DAPI	Vector Laboratories	H-1200	
BCIP/NBT liquid substrate system	Sigma	B1911	
Aqueous mounting medium	Sigma		
16% Paraformaldehyde	Fisher	AA433689M	Stock solution is 16%, use it at 4%
Hematoxylin and eosin	Sigma	GH53/HT110216	
PAS staining	Sigma	395B	