

Materials List for:

Combinational Treatment of Trichostatin A and Vitamin C Improves the Efficiency of Cloning Mice by Somatic Cell Nuclear Transfer

Rika Azuma¹, Kei Miyamoto², Mami Oikawa³, Masayasu Yamada⁴, Masayuki Anzai^{1,5}

¹Division of Biological Science, Graduate School of Biology-Oriented Science and Technology, Kindai University

²Faculty of Biology-Oriented Science and Technology, Kindai University

³Wellcome Trust/Cancer Research UK Gurdon Institute and Department of Zoology, University of Cambridge

⁴Laboratory of Reproductive Biology, Graduate School of Agriculture, Kyoto University

⁵Institute of Advanced Technology, Kindai University

Correspondence to: Masayuki Anzai at anzai@waka.kindai.ac.jp

URL: <https://www.jove.com/video/57036>

DOI: [doi:10.3791/57036](https://doi.org/10.3791/57036)

Materials

Name	Company	Catalog Number	Comments
NaCl	Sigma-Aldrich, Co., Lcc.	28-2270-5	For medium
KCl	Wako Pure Chemical Industries, Ltd.	169-03542	For medium
KH ₂ PO ₄	Wako Pure Chemical Industries, Ltd.	165-04242	For medium
MgSO ₄ · 7H ₂ O	Wako Pure Chemical Industries, Ltd.	137-00402	For medium
CaCl ₂ · 2H ₂ O	Wako Pure Chemical Industries, Ltd.	039-00431	For medium
D(+)-Glucose	Wako Pure Chemical Industries, Ltd.	041-00595	For medium
Sodium Pyruvate	Wako Pure Chemical Industries, Ltd.	199-03062	For medium
L-Glutamine	Sigma-Aldrich, Co., Lcc.	G3126	For medium
Polyvinylpyrrolidone	Wako Pure Chemical Industries, Ltd.	168-17042	For medium
NaHCO ₃	Nacalai tesque, Inc.	31213-15	For medium
Sodium DL-Lactate	Nacalai tesque, Inc.	31605-72	For medium
Penicillin	Meiji Seika Pharma Co., Ltd.	4987222637671 (GTIN-13)	For medium
Streptomycin	Meiji Seika Pharma Co., Ltd.	4987222665643 (GTIN-13)	For medium
Sterile water, endotoxin free	Wako Pure Chemical Industries, Ltd.	196-15645	For medium
EDTA · 2Na	Dojindo Lab.	345-01865	For medium
Phenol red	Sigma-Aldrich, Co., Lcc.	P0290	For medium
HEPES sodium salt	Sigma-Aldrich, Co., Lcc.	H3784	For medium
Polyvinyl alcohol	Sigma-Aldrich, Co., Lcc.	P8136	For medium
Bovine serum albumin	Sigma-Aldrich, Co., Lcc.	A3311	For medium
BT AG 501-X8 (D) Resin	Bio-Rad Lab., Inc.	143-7425	For preparation of dBSA
Hyaluronidase	Sigma-Aldrich, Co., Lcc.	H3506	For collection of oocytes and cumulus cells
Cytochalasin B	Wako Pure Chemical Industries, Ltd.	034-17554	For enucleation and oocytes activation
Piezo micro manipulator	Prime tech, Co., Ltd.	PMM-150FU	For micromanipulation

HVJ Envelope Cell Fusion Kit GenomONE-CF	Ishihara sangyo kaisha, Ltd.	CF001	Containing 0.5 mL of HVJ-E suspension solution and 10 mL of cell fusion buffer for cell fusion
SrCl ₂ · 6H ₂ O	Wako Pure Chemical Industries, Ltd.	193-09442	For oocytes activation
EGTA	Sigma-Aldrich, Co., Lcc.	E8145	For oocytes activation
Dimethyl sulfoxide	Wako Pure Chemical Industries, Ltd.	045-24511	For solvent
Trichostatin A	Sigma-Aldrich, Co., Lcc.	T1952	For incubating with SCNT embryos
L-Ascorbic acid	Sigma-Aldrich, Co., Lcc.	A5960	For incubating with SCNT embryos
Mineral oil	Sigma-Aldrich, Co., Lcc.	M8410	For covering medium