

**Supplementary information, Table S2** The list of culture methods for the cell samples used in the study

Sample Name	Culture Medium	Culture Condition and Passage Method
<b>Human embryonic stem cells</b>		
BG01	StemPro <sup>®</sup> hESC SFM <sup>1</sup>	Matrigel, enzymatic passage <sup>8</sup>
BG02	StemPro <sup>®</sup> hESC SFM <sup>1</sup>	Matrigel, enzymatic passage <sup>8</sup>
BG03	StemPro <sup>®</sup> hESC SFM <sup>1</sup>	Matrigel, enzymatic passage <sup>8</sup>
WA01	hESC medium <sup>2</sup>	Radiation-inactivated MEF feeder, enzymatic passage <sup>8</sup>
WA07	EctoBias medium <sup>5,6</sup>	Matrigel <sup>6</sup>
WA09 P31	hESC medium <sup>7</sup>	Mitomycin C-treated SNL feeder, enzymatic passage <sup>9</sup>
WA01 P35	hESC medium <sup>7</sup>	Mitomycin C-treated SNL feeder, enzymatic passage <sup>9</sup>
WA09P90_MEF/MAN	hESC medium <sup>2</sup>	Radiation-inactivated MEF feeder, manual passage
WA09P90_MG/MAN	StemPro <sup>®</sup> hESC SFM <sup>1</sup>	Matrigel, manual passage
WA09P90_MEF/ACC	hESC medium <sup>2</sup>	Radiation-inactivated MEF feeder, enzymatic passage <sup>8</sup>
WA09P42_MG/ACC	StemPro <sup>®</sup> hESC SFM <sup>1</sup>	Matrigel, enzymatic passage <sup>8</sup>
WA09P90_MG/ACC	StemPro <sup>®</sup> hESC SFM <sup>1</sup>	Matrigel, enzymatic passage <sup>8</sup>
<b>Induced pluripotent stem cells from Human Dermal Fibroblasts (HDF)</b>		
201B2 P24	hESC medium <sup>7</sup>	Mitomycin C-treated SNL feeder, enzymatic passage <sup>9</sup>
201B6 P24	hESC medium <sup>7</sup>	Mitomycin C-treated SNL feeder, enzymatic passage <sup>9</sup>
201B7 P24	hESC medium <sup>7</sup>	Mitomycin C-treated SNL feeder, enzymatic passage <sup>9</sup>
201B7 P78	hESC medium <sup>7</sup>	Mitomycin C-treated SNL feeder, enzymatic passage <sup>9</sup>
253G1 P24	hESC medium <sup>7</sup>	Mitomycin C-treated SNL feeder, enzymatic passage <sup>9</sup>
253G4 P24	hESC medium <sup>7</sup>	Mitomycin C-treated SNL feeder, enzymatic passage <sup>9</sup>
iPS2.HDF-ALS275	hESC medium <sup>2</sup>	Radiation-inactivated MEF feeder, manual passage
iPS8.HDF-ALS284	hESC medium <sup>2</sup>	Radiation-inactivated MEF feeder, manual passage
iPS5.HDF-ALS285	hESC medium <sup>2</sup>	Radiation-inactivated MEF feeder, manual passage
iPS11.HDF	StemPro <sup>®</sup> hESC SFM <sup>1</sup>	Matrigel, enzymatic passage <sup>8</sup>
iPS7.HDF	StemPro <sup>®</sup> hESC SFM <sup>1</sup>	Matrigel, enzymatic passage <sup>8</sup>
iPS1.HDF	StemPro <sup>®</sup> hESC SFM <sup>1</sup>	Matrigel, enzymatic passage <sup>8</sup>
<b>Induced pluripotent stem cells from Human Epidermal Melanocytes (HEM)</b>		
iPS1.HEMd	hESC medium <sup>2</sup>	Radiation-inactivated MEF feeder, manual passage
iPS2.HEMd	hESC medium <sup>2</sup>	Radiation-inactivated MEF feeder, manual passage
<b>Cells used for reprogramming</b>		
aHDF	DMEM with 10% FBS <sup>3</sup>	enzymatic passage <sup>10</sup>
HDF51	DMEM with 10% FBS	enzymatic passage <sup>10</sup>
HDF-ALS275	DMEM with 10% FBS	enzymatic passage <sup>10</sup>
HDF-ALS284	DMEM with 10% FBS	enzymatic passage <sup>10</sup>
HEMd	MeIM <sup>4</sup>	enzymatic passage <sup>10</sup>
<b>Other cell types</b>		
SKMEL2	RPMI1640 with 10% FBS <sup>4</sup>	enzymatic passage <sup>10</sup>
MALME3M	IMDM with 10% FBS <sup>4</sup>	enzymatic passage <sup>10</sup>
SKMEL5	RPMI1640 with 10% FBS <sup>4</sup>	enzymatic passage <sup>10</sup>
UACC257	RPMI1640 with 10% FBS <sup>4</sup>	enzymatic passage <sup>10</sup>
WA07P34MNP29	MN differentiation medium <sup>6</sup>	Laminin <sup>6</sup>
HREpic	EpiCM <sup>4</sup>	Poly-D-Lysine, enzymatic passage <sup>10</sup>
HSkMC	SkMCM <sup>4</sup>	Poly-D-Lysine, enzymatic passage <sup>10</sup>
MEF	DMEM with 10% FBS	enzymatic passage <sup>10</sup>

1. StemPro<sup>®</sup> hESC serum-free medium (SFM): DMEM/F12 plus GlutaMax<sup>™</sup>-I media (Invitrogen, Carlsbad, CA) containing 12ng/ml bFGF (Stemgent, Cambridge, MA), 1.8% BSA (Invitrogen, Carlsbad, CA), 100μM β-mercaptoethanol (Invitrogen, Carlsbad, CA) and 1x StemPro<sup>®</sup> hESC supplement (Invitrogen, Carlsbad, CA)
2. hESC medium: MDEM/F12 media with L-glutamine (Invitrogen, Carlsbad, CA) containing 20% KnockOut<sup>™</sup> Serum Replacement (Invitrogen, Carlsbad, CA), 100μM non-essential amino acids (Invitrogen, Carlsbad, CA), 100μM β-mercaptoethanol (Invitrogen, Carlsbad, CA), 12ng/ml bFGF (Stemgent, Cambridge, MA)
3. This medium contains 50 units/ml penicillin and 50 μg/ml streptomycin (Invitrogen, Carlsbad, CA).
4. This medium contains 100 units/ml penicillin and 100 μg/ml streptomycin (Invitrogen, Carlsbad, CA).
5. This medium contains 20 ng/ml bFGF (Millipore, Billerica, MA).
6. Ref. 18
7. MDEM/F12 media with L-glutamine (Invitrogen, Carlsbad, CA) containing 20% KnockOut<sup>™</sup> Serum Replacement (Invitrogen, Carlsbad, CA), 100μM non-essential amino acids (Invitrogen, Carlsbad, CA), 100μM β-mercaptoethanol (Invitrogen, Carlsbad, CA), 4ng/ml bFGF (Wako, Osaka, Japan), 50 units/ml penicillin and 50 μg/ml streptomycin (Invitrogen, Carlsbad, CA)
8. StemPro<sup>®</sup> Accutase<sup>®</sup> Cell Dissociation Agent was used as the enzyme source.
9. CTX solution containing 0.25% trypsin, 100μg/ml collagenase IV, 1mM calcium chloride and 20% KnockOut<sup>™</sup> Serum Replacement was used as the enzyme source.
10. Solution containing 0.05% Trypsin and 0.02% EDTA (Invitrogen, Carlsbad, CA) was used as the enzyme source.