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DAPI TUBB3 DAPI AFP

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Supplementary Figure 1



Supplementary Figure 1A. Relatedness matrix revealing high genetic correlation between iPSC lines and the fibroblast cells they were derived from. DNA was extracted from both fibroblast cells and iPSC lines, and molecular karyotyping was performed. A relatedness matrix was then constructed to confirm genetic identity.



Supplementary Figure 1B. All generated iPSC lines were negative for *Mycoplasma* contamination. Briefly, cells were cultured for 7 days without media change. Media was then sampled using the LookOut^(R) Mycoplasma PCR Detection Kit to check for contamination. The passage number of each culture is given in the above figure, as well as an internal positive control.

Supplementary Table 1. Summary of reprogramming-induced CNVs. Presence of a CNV in a clone is designated by an 'x'. Gene function is summarised from ENTREZ gene summaries.

Location	Gene(s)	Function (ENTREZ Gene Summary)	CNV	awr925 Fibros awr925 CL28 awr925 CLM+ jem 839 Fibros jem 839 CL5 jem 839 CL7 wya376 Fibros wya376 CL4 wya376 CL6 rnk720 Fibro rnk730 CL20 rnk730 CL20
chr2:154331015-154591820	RPRM	Regulation of mitotic cell cycle	Deletion	х
chr12:43637198-4423890	ADAMTS20	Tissue remodeling	Deletion	x
chrX:41116530-41412729	DDX3X	ATP-dependent RNA heli case activity	Duplication	x
chr6:1890563-1957861	FOXC1	Plays a role in the regulation of embryonic and ocular development	Deletion	x
chr20:14984812-15066460	Intronic MACROD2	Removes ADP-ribose from mono-ADP-ribosylated proteins	Deletion	x
chr7:14984812-15066460	Telomeric VPR2	Responds to the pituitary hormone and nine vasopressin (AVP) to maintain water horneostasis	Deletion	x
chr7:64166802-64388472	7NF107-7NF138	Transcriptional regulator	Deletion	Y
chr7:66131189-66401457	RARGEE1-VCDT7-LOC720156	Eusertion under	Deletion	-
chr22:18892575-19007688	PROD1; DGCR6; DGCR5	Mitochondrial protein that catalyzes the first step in proline degradation	104	*