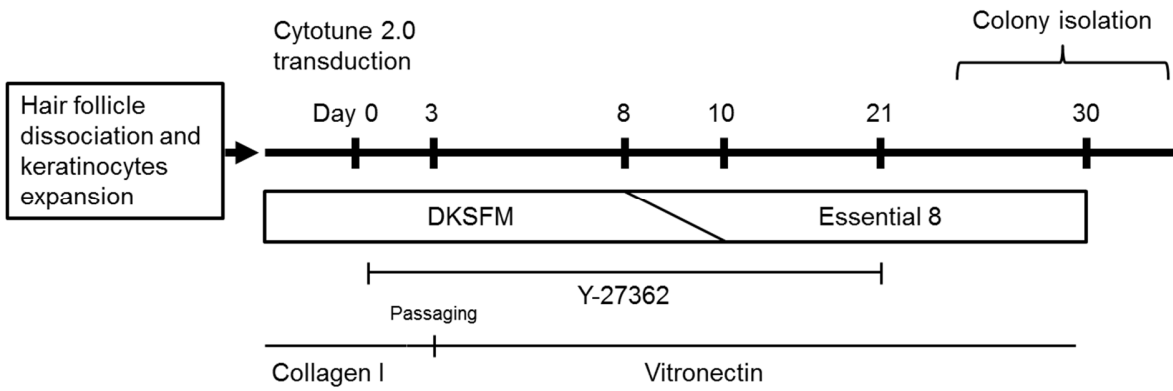


1 **1 Supplementary material**

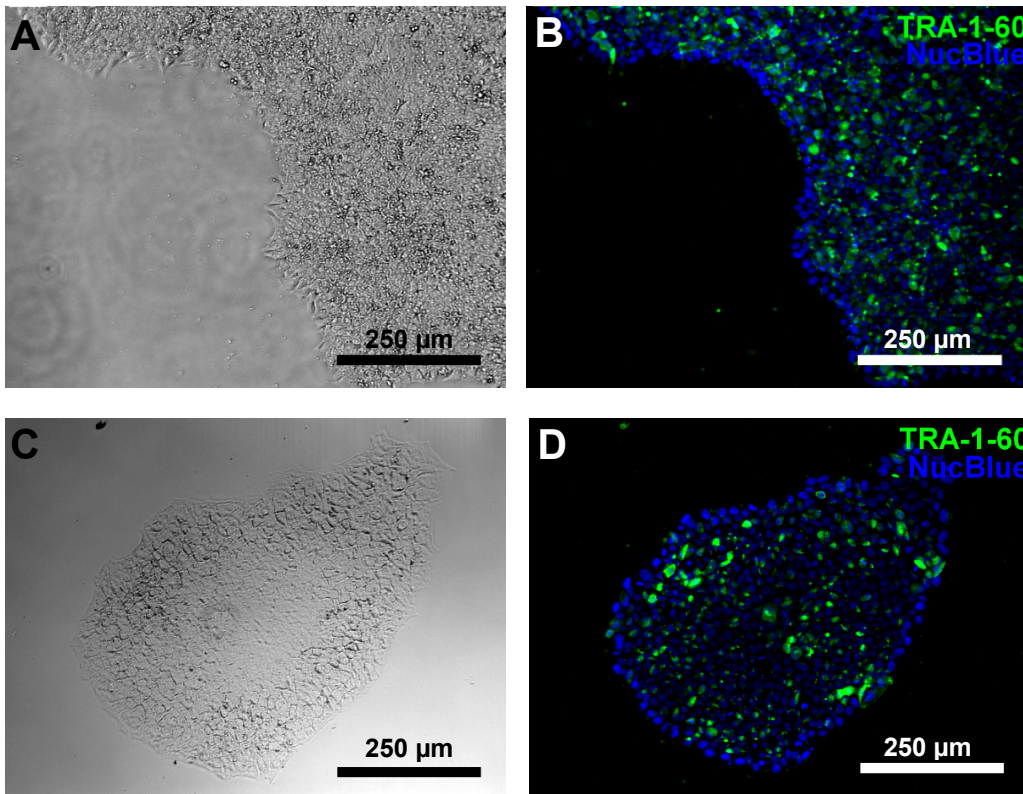
2



3

4 **Figure S 1:** Overview of the reprogramming of hair derived keratinocytes.

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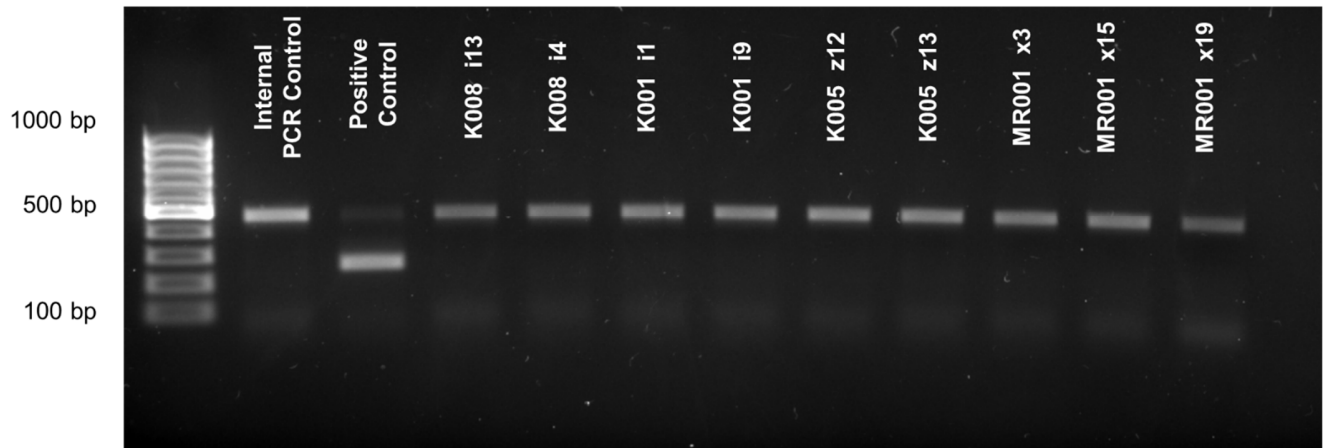
7

8 **Figure S 2:** Comparison between the generated iPSC line and the commercial iPSC line. (A) Phase
 9 contrast image of a colony from the generated iPSC line. (B) TRA-1-60 (green) staining and nucleus
 10 staining with NucBlue (blue) shows that generated iPSC line expresses the pluripotency marker. (C)
 11 Phase contrast image of a colony from the commercial iPSC line. (D) TRA-1-60 (green) staining and

iPSCs derived from follicular keratinocytes

12 nucleus staining with NucBlue (blue) shows that commercial iPSC line expresses the pluripotency
13 marker.

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15

16 **Figure S 3:** Mycoplasma contamination assay. PCR products using the mycoplasma detection kit run
17 on a 1.2% agarose gel. Mycoplasma genome in the tested samples was not detected, as indicated by
18 the lack of a ca 260 bp band. The internal control band at ca 480 bp indicates a successfully performed
19 reaction. K, control; MR, methylphenidate responder ADHD patient.

20

21 **Table S1:** Staining material used for the characterization of the neuronal cells.

Product	Manufacturer	Cat. No
Fluoroshield Mounting Medium With DAPI	Abcam	ab104139
Goat anti-Mouse IgG Alexa Fluor 594	Invitrogen	A-11032
Goat anti-Rabbit IgG Alexa Fluor 488	Invitrogen	A-11034
Mouse anti-GFAP	SantaCruz	sc-33673
Rabbit anti-Tubulin β 3 (TUBB3)	BioLegend®	845501

22

23 **Table S2:** List of the primer used for the characterization of the various cell types.

Gene Symbol	Sequence (5' \rightarrow 3')	Ann. Temp (°C)	Product Length (bp)	Melting Point Temp (°C)	Sequence Source
<i>TERT</i>	F: TGTC AAGGTGGATGTGACGG R: GAGGAGCTCTGCTCGATGAC	60	267	88.0	Primer-BLAST
<i>NES</i>	F: CAAGATGTCCTCAGCCTGG R: GGGGTCCTAGGGAATTGCAG	60	144	86.5	Primer-BLAST
<i>LIN28A</i>	F: AGCGCAGATCAAAGGAGACA R: CCTCTCGAAAGTAGGTTGGCT	60	189	85.5	Primerbank: 94536796c2

iPSCs derived from follicular keratinocytes

<i>PAX6</i>	F: AACGATAACATACCAAGCGTGT R: GGTCTGCCCGTTCAACATC	60	120	81.5	PrimerBank ID 189083679c3
<i>MAP2</i>	F: CGAAGCGCCAATGGATTCC R: TGAACTATCCTTGCAGACACCT	60	161	83.0	PrimerBank ID 87578393c2
<i>KRT14</i>	According to manufacturer	60	76	79.0	Qiagen 249900 (QT00052283)
Sendai Virus (SeV)	F: GGATCACTAGGTGATATCGAGC R: ACCAGACAAGAGTTTAAGAGATATGTATC	60	181	81.0	CytoTune 2.0 manual (Invitrogen)
<i>OCT3/4</i>	F: GGA GGA AGC TGA CAA CAA TGA AA R: GGC CTG CAC GAG GGT TT	65	64	78.0	Alonso-Barroso et al., 2017
<i>NANOG</i>	F: TACCTCAGCCTCCAGCAGAT R: CTTCTGCGTCACACCATTGC	58.4	150	82.0	Primer-BLAST
<i>HMBS</i>	According to manufacturer	60	107	83.5	Qiagen 249900 (QT00014462)
<i>ACTB</i>	According to manufacturer	60	146	87.0	Qiagen 249900 (QT00095431)
<i>GAPDH</i>	According to manufacturer	60	95	82.0	Qiagen 249900 (QT00079247)

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26 **Table S3:** Gene expression values and relative gene expression value (in %) calculated from the generated relative quantities from the
 27 pluripotency markers qRT-PCR analysis

	KRT14 (Mean±SEM)	% KRT14 Relative to keratinocyte (Mean±SEM)	LIN28A (Mean±SEM)	% LIN28A Relative to commercial hiPSC line (Mean±SEM)	NANOG (Mean±SEM)	% NANOG Relative to commercial hiPSC line (Mean±SEM)	OCT3/4 (Mean±SEM)	% OCT3/4 Relative to commercial hiPSC line (Mean±SEM)	TERT (Mean±SEM)	% TERT Relative to commercial hiPSC line (Mean±SEM)
Keratinocytes	1.00±0.21	100±29.70	0.00±0	0.00±0	0.00±0	0.00±0	0.00±0	0.00±0	0.00±0	0.00±0
hES control line	0.00±0	0.00±0	2.15±0.13	191.96±18.32	1.05±0.07	147.89±13.25	1.64±0.07	147.75±14.80	0.78±0.10	177.50±28.91
hiPSC commercial line	0.00±0	0.00±0	1.12±0.08	100.00±10.49	0.71±0.04	100.00±8.45	1.11±0.10	100.00±12.87	0.44±0.04	100.00±14.46
iPSC K001 i1	0.00±0	0.00±0	0.76±0.07	67.95±7.80	0.83±0.04	116.90±9.33	0.80±0.08	72.25±9.86	3.57±0.13	811.36±88.08
iPSC K001 i9	0.00±0	0.00±0	0.60±0.03	53.30±4.78	0.59±0.05	83.24±9.26	0.93±0.04	83.96±8.42	3.21±0.31	729.55±88.08
iPSC K005 z12	0.00±0	0.00±0	0.43±0.03	38.75±3.82	0.30±0.02	42.54±4.08	0.61±0.03	54.95±5.74	0.30±0.05	68.64±12.59
iPSC K005 z13	0.00±0	0.00±0	0.59±0.03	52.68±4.79	0.71±0.07	99.72±11.41	0.90±0.08	81.08±10.26	0.20±0.02	46.36±46.36
iPSC K008 i13	0.00±0	0.00±0	0.52±0.04	46.25±4.86	0.56±0.04	79.15±6.98	0.52±0.04	46.49±5.84	0.40±0.05	90.45±15.01
iPSC K008 i4	0.00±0	0.00±0	2.68±0.31	239.29±32.88	2.98±0.35	419.72±55.18	1.41±0.19	127.03±20.88	25.20±3.19	5727.27±932.05
iPSC MR001 x15	0.00±0	0.00±0	1.06±0.05	94.64±8.37	1.88±0.16	264.79±27.76	1.25±0.06	112.61±11.56	0.77±0.11	174.55±31.28
iPSC MR001 x19	0.00±0	0.00±0	2.44±0.10	217.86±18.32	4.06±0.42	571.83±68.43	1.48±0.06	133.33±13.32	0.54±0.09	121.82±23.18