

A woman with short blonde hair, wearing a white lab coat and a small hoop earring, is shown in profile from the chest up. She is holding a pipette and looking down at it. The background is a blurred laboratory setting with various pieces of equipment and glassware. The entire image has a semi-transparent dark blue overlay.

Reprogramming of 24 patient fibroblast samples: QC analysis. Pluripotency test

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Pluripotency analysis

SAMPLES	OCT4	NANOG	GAPDH
Cell line 1 143 cl 1	1.19	0.95	1
Cell line 2 145 cl 2	0.99	0.92	1
Cell line 3 146 cl 1	1.23	0.88	1
Cell line 4 152 cl 3	1.00	0.56	1
Cell line 5 165 cl 2	0.98	0.75	1
Cell line 6 169 cl 3	1.16	0.65	1
Cell line 7 102:5 cl 1	1.41	0.75	1
Cell line 8 104:5 cl 2	1.21	0.94	1
Cell line 9 117:5 cl 3	1.16	1.11	1
Cell line 10 120:5 cl 3	0.92	0.62	1
Cell line 11 110:5 cl 1	0.81	0.82	1
Cell line 12 105:5 cl 3	1.20	0.77	1
Cell line 13 151 cl 1	1.11	0.79	1
Cell line 14 163 cl 2	1.01	0.87	1
Cell line 15 141 cl 3	0.65	0.84	1
Cell line 16 142:3 cl 1	0.80	1.15	1
Cell line 17 RES168 cl 1	0.91	0.89	1
Cell line 19 RES114:5 cl 3	1.13	0.66	1
Cell line 20 RES116:5 cl 2	0.74	0.73	1
Cell line 21 RES118:5 cl 1	0.80	0.60	1
Cell line 22 RES121:5 cl 5	0.81	0.38	1
Cell line 23 RES174 cl 4	0.78	0.47	1
Cell line 24 RES158 cl 4	0.93	0.55	1
Control iPSC line: BIONi010-C	1	1	1

Fold over reference sample is based on the formula:

$$2^{-\Delta\Delta Ct} = 2^{-(\Delta Ct \text{ target tissue} - \Delta Ct \text{ reference tissue})}$$

Where:

ΔCt = Ct gene of interest – Ct house keeping gene

Target tissue = reprogrammed cell lines

Reference tissue = iPSC line BIONi010-C

Genes of interest = OCT4, NANOG

Housekeeping gene = GAPDH

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All reprogrammed lines tested showed pluripotency ability.