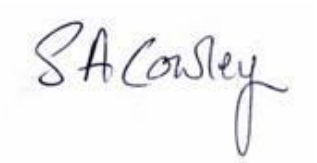
Certificate of analysis

SFC848-03-02

Operator: Cathy Browne Date: 06/07/15

Supervisor: Sally Cowley Date: 19.08.2016

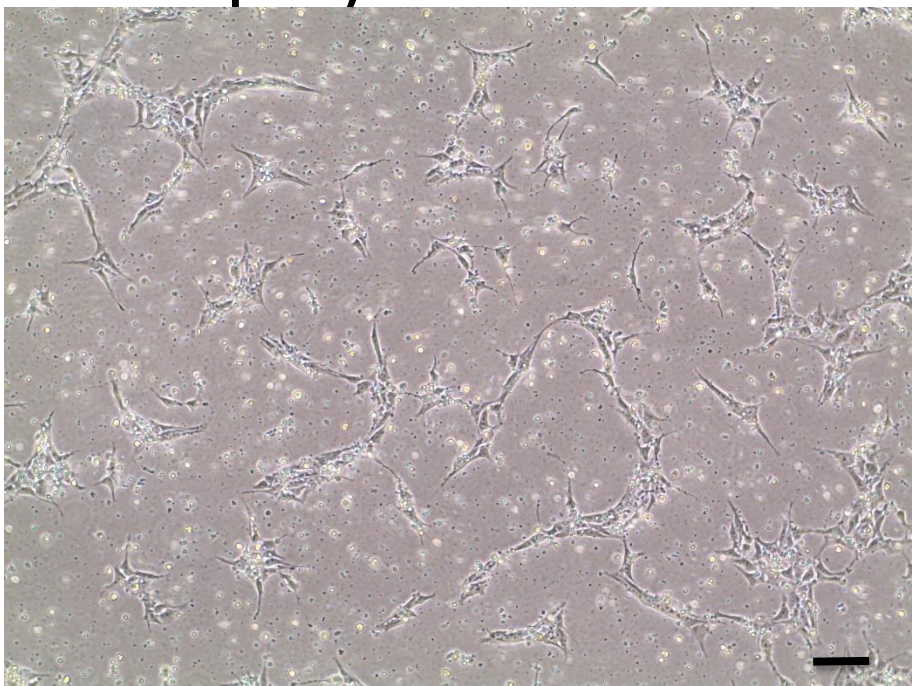
Signature: 

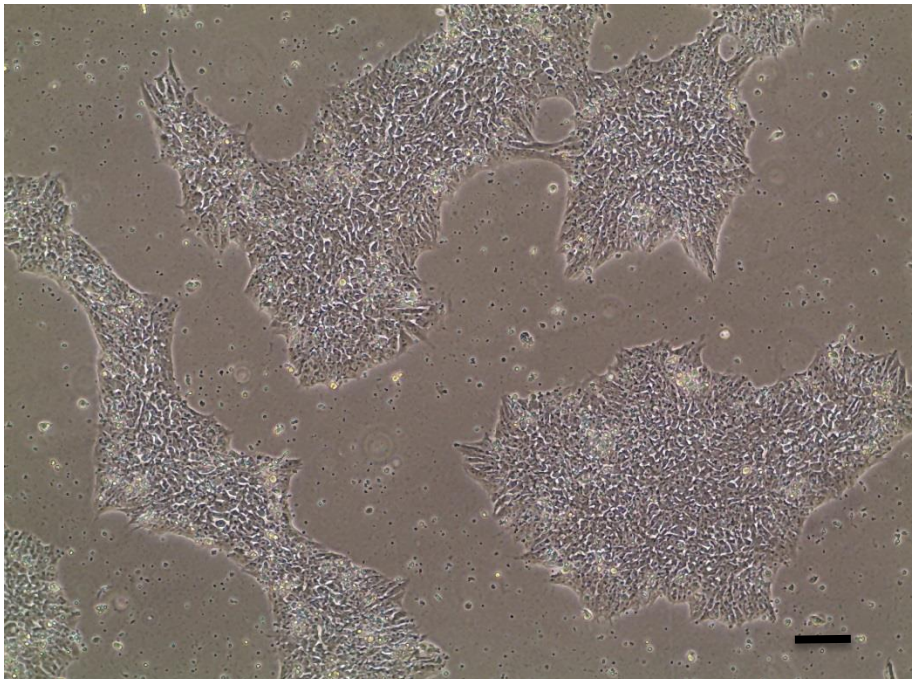
Source of fibroblasts and reprogramming information

- SF848 from Oxford University 05/10/12
- Reprogrammed at UOXF S (JMSCF AB)
- Reprogrammed on 14/08/14 at passage 3
- Cytotune v1 WP3 SOP10

Viability post-thaw and Morphology according to SOP19 passage 21

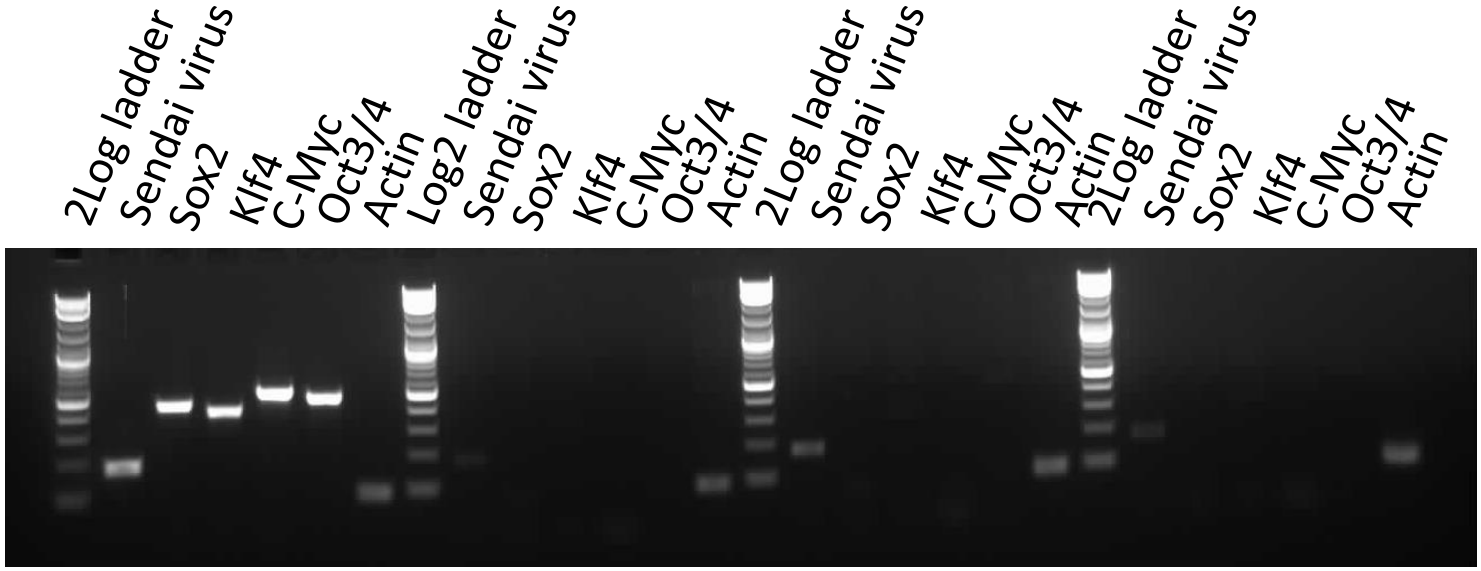
- Cell count immediately post-thaw 3.38 x 10^6
- Viability immediately post-thaw 85.2%
- Photo at 24h & day 6 post-thaw (scale bar = 100µm):





Sendai clearance: according to WP3 SOP15 undetectable at passage 21

except very faint SeV backbone



+ control **SFC848-03-02** SFC848-03-04 SFC848-03-06

Product sizes: SeV 181bp; SeV-Sox 451bp; SeV-Klf 410bp; SeV-Myc 532bp; SeV-Oct 483bp; Actin 92bp

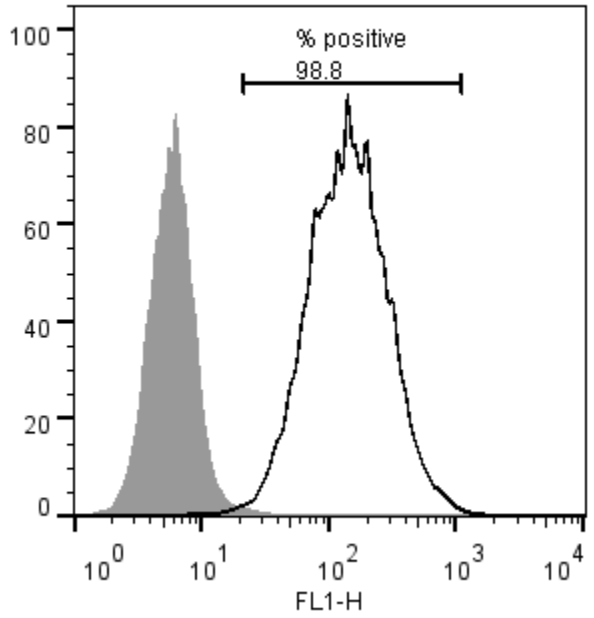
Mycoplasma Test:
According to MycoAlert Lonza LT07-318 undetectable at passage 21

Sample	Clone	Passage number	Initial	Reading 1	Reading 2	Ratio/Status
+ve control				8.539	88.04	**10.31**
-ve control				9.475	0.883	**0.09**
1	SFC848-03-02	p21	CB	2.886	0.861	**0.30**

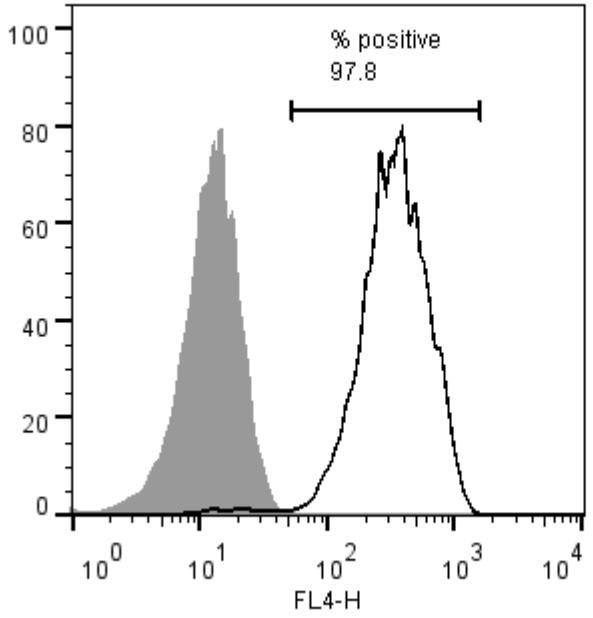
Results mean
Ratio **0 - 0.999** negative for mycoplasma
Ratio **1 – 1.3** Borderline Result (retest required)
Ratio above **1.3** positive for mycoplasma

Flow cytometric analysis according to WP3 SOP 20 and 21 passage p21

Tra-1-60:



NANOG:



SNP analysis according to WP3 SOP Preparation of DNA and RNA samples for Illumina arrays

- Passage p21
- Identity to parent fibroblasts confirmed
- Karyotype abnormalities: **StemDB calls an abnormality of loss of whole of ChrX, however, it clearly still has a full X Chromosome. This has been cross-checked with KaryoStudio analysis, which shows normal X Chr, and also SNP on a subsequent expanded batch of cells (07.2016) at UOXF S is normal**
- For details and raw data see StemDB