UK Dementia Research Institute

CARDIFF UNIVERSITY
PRIFYSGOL CAERDYDD

Certificate of analysis

DRICUi020-A

Operator: J Winston Date: 09/10/2024

Supervisor: H Hall-Roberts Date: 09/10/2024

Signature: 

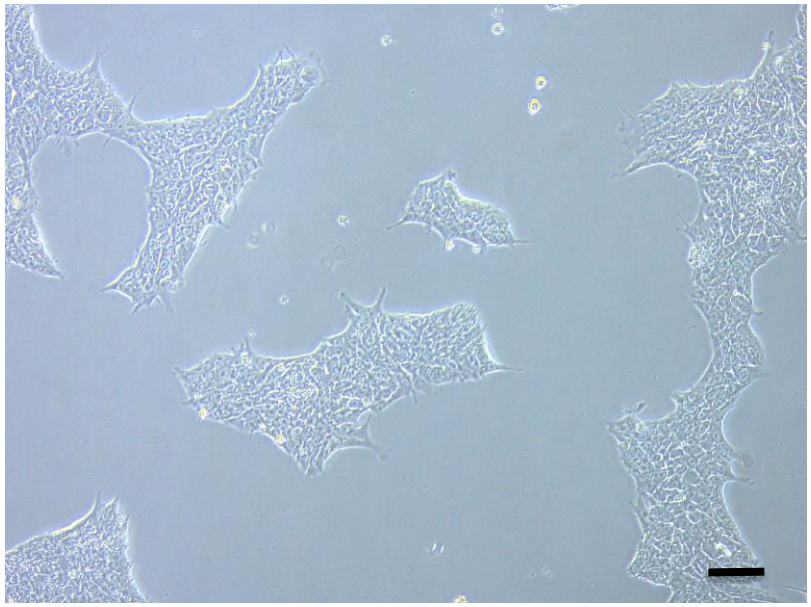
Source of cells and reprogramming information

- CF00C9047a T cells from Cardiff 16/12/2021
- Reprogrammed at UOXF AKA IPMAR22
- Reprogrammed on 04/2022 Sally Cowley (Oxford)
- Reprogramming system Cytotune v2
- Clone DRICUi020-A = IPMAR22A11
- Banked at p21 07/2023 Sarah Ellwood (Oxford)
- Cytotune performed at Oxford by Sarah Ellwood, other QC at Cardiff by Jincy Winston

Viability post-thaw and Morphology according to JMSCFSOP19 passage 22

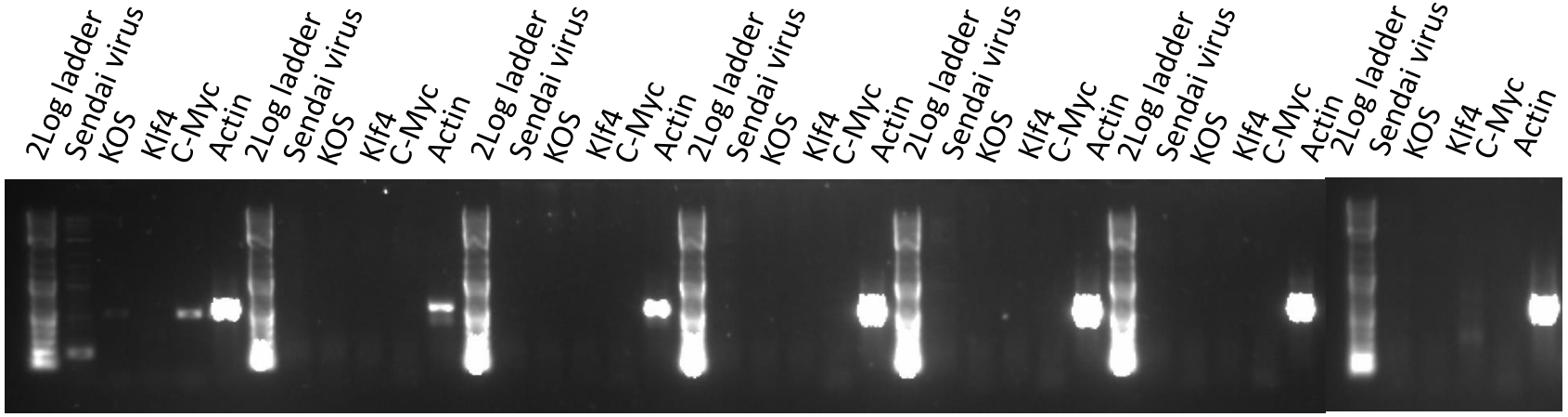
- Vial cell count immediately post-thaw 2.0 x 10^6
- Viability immediately post-thaw 84%
- Photo at day 2 post-thaw (scale bar = 100µm):

Day 2 post-thaw, 20% plated to 1w.6wp



Sendai Cytotune 2 clearance: according to Cytotune manual

KOS and Klf4 undeterminable but
Virus backbone and c-Myc undetectable at passage 18 so overall pass



+ve control	xxx	xxx	DRICUi020-A/IPMAR22A 11 heated p18	xxx	xxx	xxx

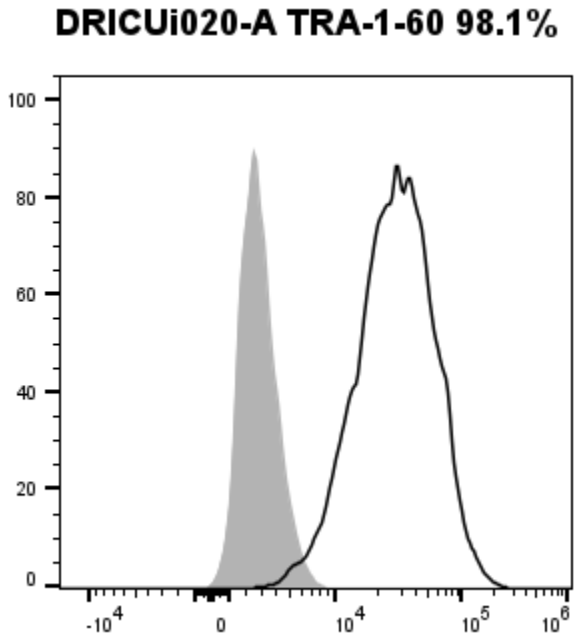
Product sizes: SeV 181bp; KOS 528bp; SeV-Klf 410bp; SeV-Myc 532bp; Actin 623bp

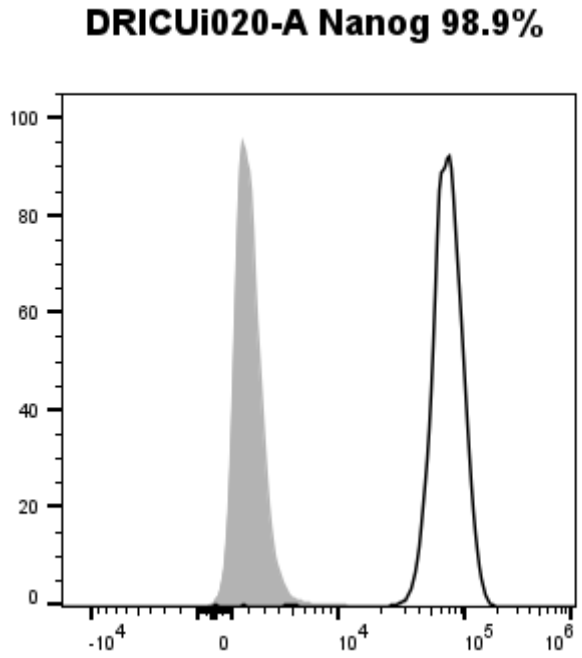
Sterility:

Mycoplasma test performed by Eurofins Genomics on 13/09/2024, undetectable at passage 23.

Visual inspection of thawed cells cultured without antibiotic/antimycotic for 4 days:
no evidence of bacteria, yeast or fungus.

Flow cytometric analysis according to JMSCFSOP05 passage 22

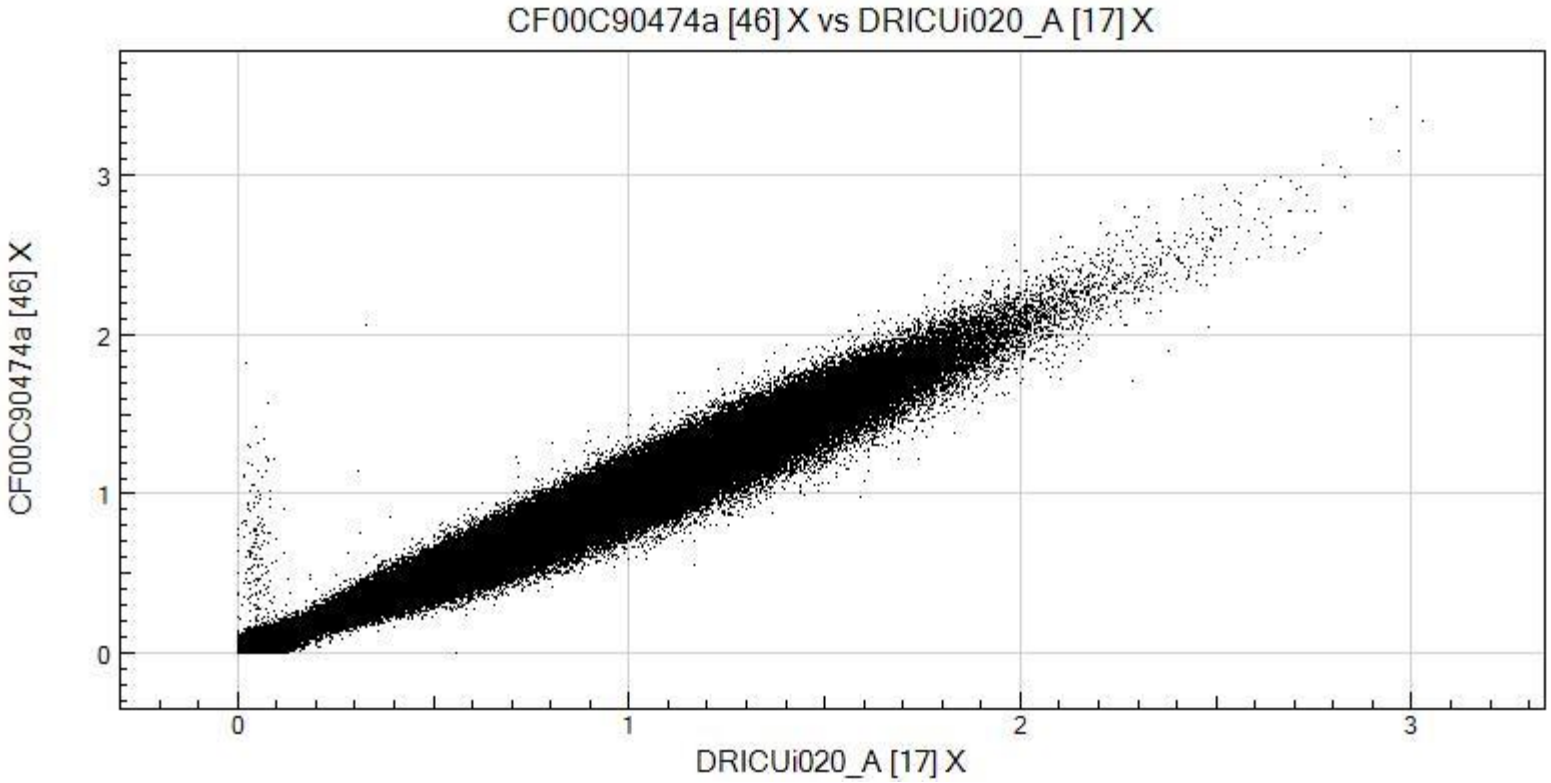




Illumina GSA SNP analysis according to JMSCFSOP16

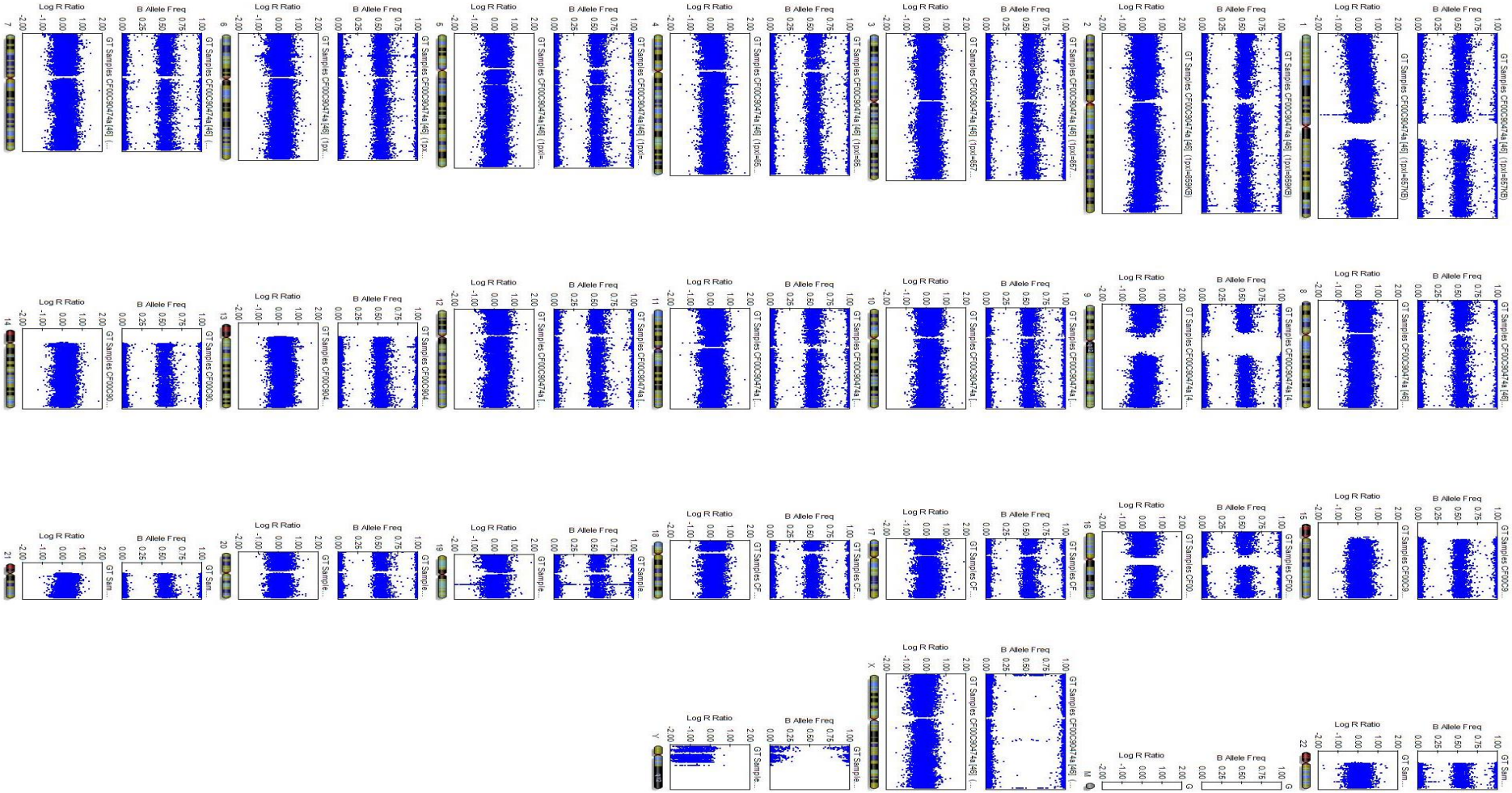
- Passage 21
- Identity to parent PBMC confirmed
- Karyotype abnormalities:
  - No gross abnormalities detected vs PBMC

Alignment of CF00C90474A PBMC SNPs with DRICUi020-A



Regression Coefficient
R^2 =0.9832

Karyogram CF00C90474A PBMC



Karyogram DRICUi020-A