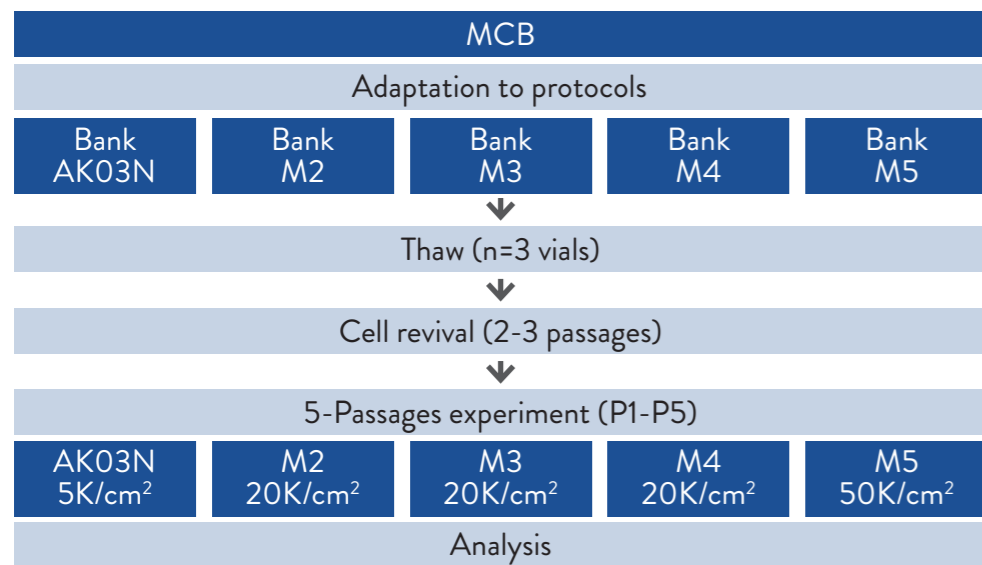


SUPERIOR PERFORMANCE OF STEMFIT® AK03N FOR THE CULTURE OF INDUCED PLURIPOTENT STEM CELLS

The Cell and Gene Therapy Catapult conducted comparative cultivation testing with competitors' products



Culture cycle (feeding scheme)

AK03N (7 days)	M2 (5 days)	M3 (5 days)	M4 (5 days)	M5 (5 days)
Feed d1/4/5/6	Feed d1/2/3/4/5	Feed d1/2/3/4/5	Feed d1/2/3/4/5	Feed d1+pssg (d3)+d4

- Culturing CGT-RCiB10 in adherent culture with vitronectin.
- CGT-RCiB10 is a HLA-Homo iPSC line from a cGMP pre-seed lot.
- M2, M3, M4, M5 are commercially available iPSC culture media
- Passage and feeding schedule was as per manufacturer protocol and expansion protocol
- All experiment in this poster were designed and performed by CGT

Table 1. Features of StemFit® AK03N observed in current evaluation

Cell Growth	Easy expansion (Figure1)
Stability	Consistent gene expression profile throughout 5 passages (Figure 2)
	Normal karyotype (Table 2)
Metabolic Profile	Low lactate accumulation in culture supernatant (figure 3)
Pluripotency	Maintenance of pluripotency (available in CGT Catapult full poster)
	Confirmed potency of differentiation into the 3-germ layers of Embryoid Body (available in CGT Catapult full poster)

Figure 1. Easy expansion

(A) DAILY PROFILE OF POPULATION DOUBLINGS (PD)

(B) AVERAGE POPULATION DOUBLINGS THROUGHOUT 5 PASSAGES

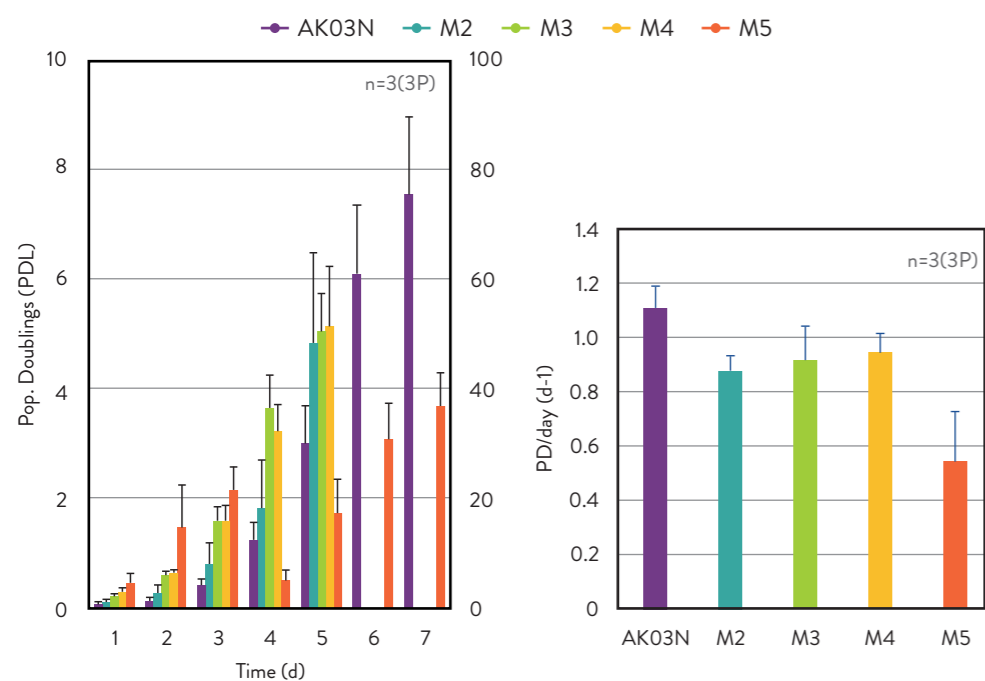


Figure 2. Consistent gene expression profile

GENE EXPRESSION DATA PROFILED EMPLOYING THE TAQMAN® SCORE-CARD™ ASSAY (N=3)

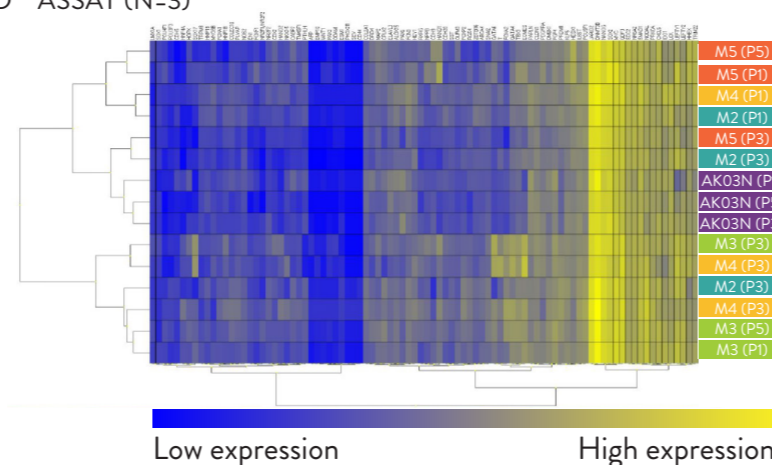
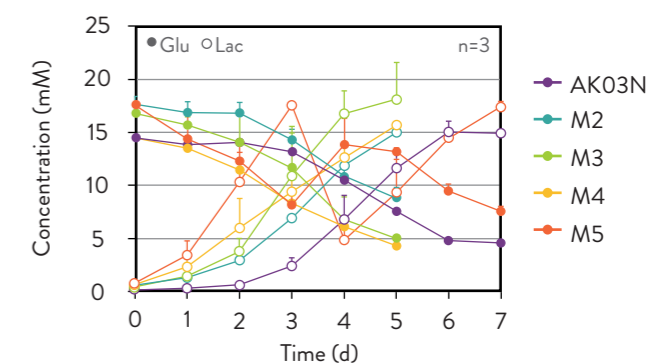


Table 2. Result of karyotyping (CGH array) analysis after expansion

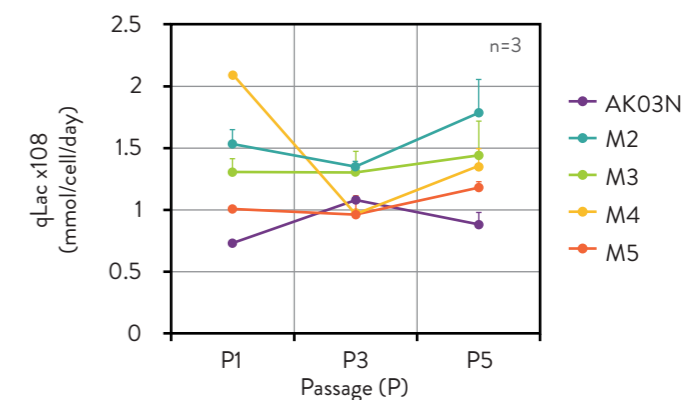
	AK03N	M2	M3	M4	M5
Bank	Normal	Normal	Normal	Normal	Normal
+P9/P10	Normal	Normal	Abnormal	Normal	Normal

Figure 3. Low lactate accumulation

(A)



(B)



The Cell and Gene Therapy Catapult

- The Cell and Gene Therapy Catapult (CGT Catapult) is a non-for-profit centre of excellence to advance the growth of the UK cell and gene therapy industry, by bridging the gap between scientific research and full-scale commercialisation.

- The Industry group of CGT Catapult aims to develop cost-effective procession platforms for the commercial manufacture and industrialisation of iPSC-derived cell therapy products using 2D and 3D culture systems.