◆ Ff-I14s04-AB II-KO-13(QHJI; iPS cells expressing the highest HLA in Japan※1)

Clone ID	Ff-I14s04-AB II-KO-13	**Product**	Human iPS cells
Source	Peripheral Blood, Human	**Race**	Japanese
Passage No.	32	**Gender**	Male
Label Name	21B78	**Manufacture Dates**	Feb. 13th, 2021
Culture medium	StemFit AK03N	**Substrate**	iMatrix-511MG
Culture Method	Feeder-free (※2)		
Genome-editing techniques	CRISPR-Cas9 (※2)		
Use and Provision of this cell stock	Please check our web site ; https://www.cira-foundation.or.jp/e/project/index.html		

（※1）**Reference;** Okita, *et. al.*, Nat Methods. 2011 8(5): 409-412

（※2）**Reference;** Huaigeng Xu, et al. Targeted Disruption of HLA Genes via CRISPR-Cas9 Generates iPSCs with Enhanced Immune Compatibility. Cell Stem Cell. 2019 Apr 4;24(4):566-578.

For Research Use Only

Test Result

Test	Method	Result
Sterility	BacT/ALERT	Negative
Mycoplasma	PCR	Negative
Endotoxin	LAL	＜ 0.017 EU/mL
Morphology	Microscope	Consistent with human ES cells
STR genotyping	PCR	Consistent with the donor cells
Karyotype	G-banding	46,XY[20]
CNV(※3)	WGS, SNP	No de novo CNVs (>1kbp) were found in COSMIC Cancer Gene Census (ver.88) and Shibata list(※4) .
SNV/Indel(※3)	WGS	No de-novo non-synonymous SNVs/Indels were found in COSMIC Cancer Gene Census (ver.88) and Shibata list (※4).
Gene editing confirmation	Sanger Sequencing	Detected of edits
	Flow cytometry	HLA-A(-) ＝ 99.98 % HLA-C(+) ＝ 99.88 %
Cardiac differentiation	Reference: “ Funakoshi et al., 2016, Sci Rep.”	TnT(+) ＝ 85.86 %
Undifferentiated markers	Flow cytometry	TRA-1-60(+) : 92.9 %
Thawed postnatal cells	Counting the number of the cells (※5)	2.05 ×10^5 cells（Survival rate ; 91.8 %）

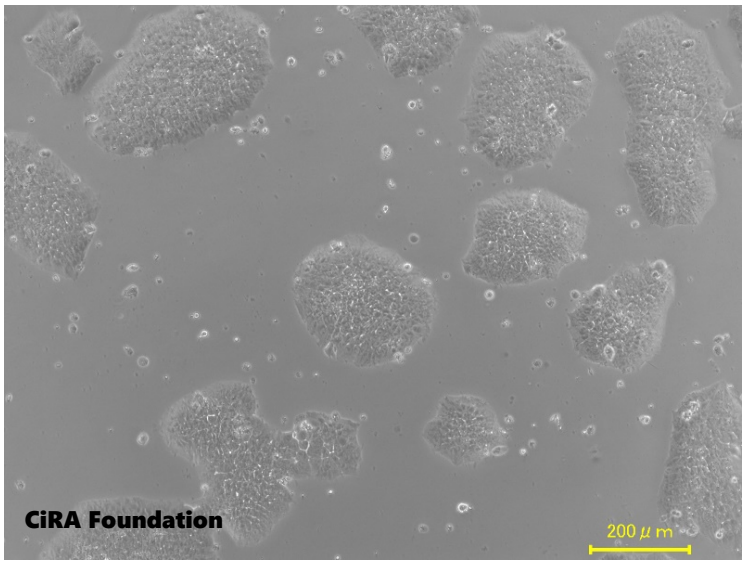
Number of proliferating cells after thawing	Counting the number of the cells after culturing for 4 days(※5).	7.69 ×10^5 cells（Number of seeded cells：0.77 ×10^5 cells）

（※3）CNV; Copy Number Variation , SNV/Indel; Single nucleotide variants /Insertion Deletion

（※4）The PMDA Science Board “Current Perspective on Evaluation of Tumorigenicity of Cellular- and Tissue-based Products Derived from induced Pluripotent Stem Cells (iPSCs) and iPSCs as Their Starting Materials”（Cellular- and Tissue-based Products Subcommittee, 20 August 2013）

（※5）NucleoCounter® NC200

■Image



Please contact us if you have any questions.

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