



◆ QHJ14s04/AB II-KO-03

(QHJI; iPS cells expressing the highest HLA in Japan*1)

Clone ID	QHJ14s04/AB II-KO-03	Product	Human iPS cells
Source	Peripheral Blood, Human	Race	Japanese
Passage No.	22	Gender	Male
Label Name	Fit__13SKC(QHJ14)-221110	Manufacture Dates	30-Nov-2022
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.



Test Result

Test	Method	Result
Sterility	Direct Inoculation Method	Negative
Mycoplasma	PCR	Negative
Endotoxin	LAL	< 0.017 EU/mL
Virology (HBV, HCV, HIV, HTLV, ParvoB19)	PCR	Negative
Morphology	Microscope	Consistent with human ES cells
Thawed postnatal cells	Cell count	2.75 x 10 ⁵ cells (Survival rate; 93.1%)
STR genotyping	PCR	Consistent with the donor cells
Undifferentiated markers	Flow cytometry	TRA-1-60(+): 99.0 % SSEA4(+); 99.8 % TRA-2-49(+); 98.9 % OCT3/4(+); 98.8 %
Gene editing confirmation	WGS	Detected of edits
	Flow cytometry ^(*6)	HLA-A(-); 99.7 % HLA-C(+); 94.6 %
Karyotype	G-banding	46,XY[20]
CNV^(*3) (*6)	WGS, SNP	No de novo CNVs (>1kbp) were found in COSMIC Cancer Gene Census (ver.96) and Shibata list ^(*4) .
SNV/Indel^(*3) (*6)	WGS	No de-novo non-synonymous SNVs/Indels were found in COSMIC Cancer Gene Census (ver.96) and Shibata list ^(*4) .
Residual guide RNA^(*6)	qPCR	Not detected
Residual Cas9^(*6)	ELISA	1.711 ng/mL ^(*7)
Cardiac differentiation^(*6)	Reference: "Funakoshi et al., 2016, Sci Rep."	TnT(+) = 70.7 %
Number of proliferating cells after thawing	Counting the number of the cells after culturing for 6 days ^(*5) .	19.46 × 10 ⁵ cells (Number of seeded cells : 0.68 × 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

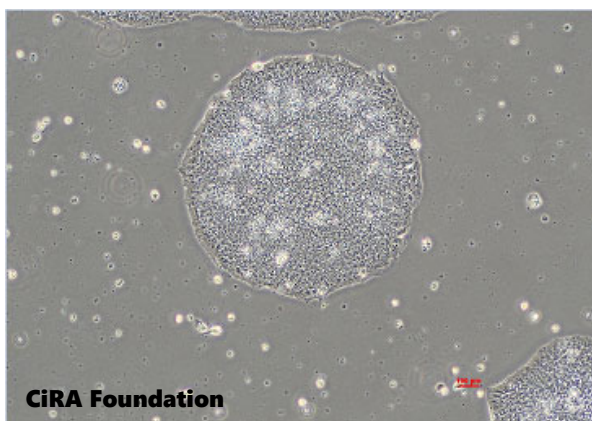
(*6) Reference test: these are not related to the product release.

(*7) As a reference, the residual value of Cas9 in the cells immediately after transfection: 6~34 ng/mL

In the negative control: 1 ng/mL.



■ Image



Scale bar: 50 μ m

Please contact us if you have any questions.

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