◆ QHJI14s04/AB II-KO-12

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

Clone ID	QHJI14s04/AB II-KO-12	**Product**	Human iPS cells
Source	Peripheral Blood, Human	**Race**	Japanese
Passage No.	22	**Gender**	Male
Label Name	Fit__13SKC(QHJI14)-230522	**Manufacture Dates**	12-Jun-2023
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	＜ 0.021 EU/mL
Virology (HBV, HCV, HIV, HTLV, ParvoB19)	PCR	Negative
Morphology	Microscope	Consistent with human ES cells
Thawed postnatal cells	Cell count	2.56 x 10^5 cells (Survival rate; 86.4 %)
STR genotyping	PCR	Consistent with the donor cells
Undifferentiated markers	Flow cytometry	TRA-1-60(+) :96.5 % SSEA4(+); 99.7 % TRA-2-49(+); 99.2 % OCT3/4(+); 99.1 %
Gene editing confirmation	WGS	Detected of edits
	Flow cytometry (*6)	HLA-A(-) ; 99.6 % HLA-C(+) ; 92.2 %
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	0.862 ng/mL (*7)
Cardiac differentiation (*6)	Reference: “ Funakoshi et al., 2016, Sci Rep.”	TnT(+) ＝ 46.3 %
Number of proliferating cells after thawing	Counting the number of the cells after culturing for 6 days(*5).	24.78 ×10^5 cells（Number of seeded cells : 0.70 ×10^5 cells）

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

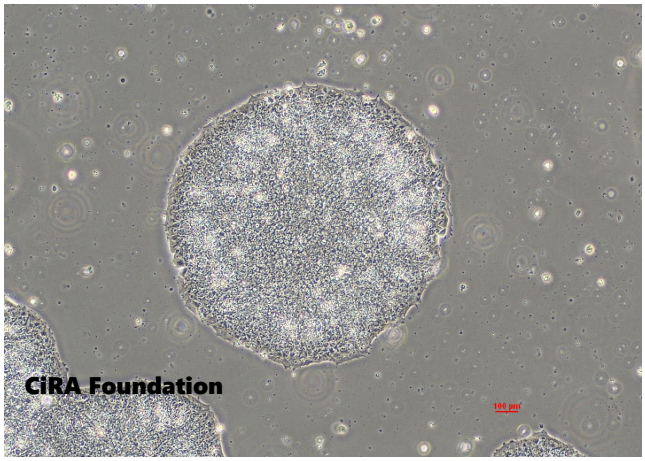
（*4）The PMDA Science Board “Current Perspective on Evaluation of Tumorigenicity of Cellular- and Tissue-based Products Derived from induced Pluripotent Stem Cells (iPSCs) and iPSCs as Their Starting Materials”（Cellular- and Tissue-based Products Subcommittee, 20 August 2013）

（*5）NucleoCounter® NC200

（*6）Referance 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 μm

Please contact us if you have any questions.

(ips-request@cira-foundation.or.jp)

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