

Certificate of Analysis

Thaw and Culture Details

Cell Line Name	STAN305i-865C2		
WiCell Lot Number	DB44177		
Provider/Client	Stanford University – Laboratory of Dr.	Thomas Quetermous	
Banked By	Icahn School of Medicine at Mount Sina	i Stem Cell Core	
Thaw and Culture Recommendations	WiCell recommends thawing 1 vial into 3 wells of a 6 well plate using mTeSR [™] 1 Cultrex [®] .		
	WiCell recommends thawing using ROC	CK Inhibitor for best results.	
Protocol	WiCell Feeder Independent Pluripotent	Stem Cell Protocol	
Culture Platform Prior to Freeze	Medium: mTeSR [™] 1	Matrix: Matrigel [®]	
Passage Number	p12 Cells were cultured for 12 passages prior to freeze and post colony selection. Plated cells at thaw should be labeled passage 13.		
Date Vialed	19-August-2015		
Vial Label	ISMMS 865i C2P12 AP 081915		
Biosafety and Use Information	Appropriate biosafety precautions should be followed when working with these cells. The end user is responsible for ensuring that the cells are handled and stored in an appropriate manner. WiCell is not responsible for damages or injuries that may result from the use of these cells. Cells distributed by WiCell are intended for research purposes only and are not intended for use in humans.		

The material provided under this certificate has been subjected to the tests specified and the results and data described herein are accurate based on WiCell's reasonable knowledge and belief. Appropriate Biosafety Level practices and universal precautions should always be used with this material. For clarity, the foregoing is governed solely by WiCell's Terms and Conditions of Service, which can be found at http://www.wicell.org/privacyandterms.

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Results

Test Description	Test Provider	Test Method	Test Specification	Result	
	WiCell	G-T-L Banding performed on 20 metaphase cells	Expected karyotype	See Report	
Karyotype	Karyotype Results: 46,XY Interpretation: This is a normal karyotype; no clonal abnormalities were detected at the stated band level of resolution.				
Post-Thaw Viable Cell Recovery	WiCell	Thaw using specified Thaw & Culture Recommendations	Recoverable attachment after passage	Pass	
Identity by STR	WiCell	PowerPlex 16 HS System by Promega [™]	Defines STR profile of deposited cell line	See Report	
Mycoplasma	WiCell	PCR	Amplification of mycoplasma specific DNA detected with negative result	Pass	
Sterility	Steris	Native Product Direct Transfer using FTM and TSB (ST/07)	Negative for growth following 14 days of culture	Pass	

Testing Reported by Provider

The Provider stated that some or all of the additional analyses listed below may have been performed for this cell line. For more information, publication and dbGaP links, where available, are provided on the cell line specific web page on the WiCell website.

- RNA-Seq

WCell

- Whole Genome Sequencing
- Infinium[®] Expanded Multi-Ethnic Genotyping Array (MEGA^{EX})

Approval Date	WiCell Quality Assurance Approval
05-April-2024	4/5/2024 XIG XIG XIG United Assurance Signed by: Gay, Jenna

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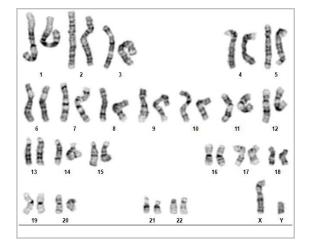
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Chromosome Analysis Report: 101092

Date Reported: March 19, 2024 Cell Line: STAN305i-865C2-DB44177 Submitted Passage #: 14 Date of Sample: 3/8/2024 Specimen: Human IPSC Results: 46,XY Cell Line Sex: Male Reason for Testing: LOT_RELEASE

Investigator: WiCell Stem Cell Bank, WiCell



Cell: 2 Slide: G01 Slide Type: Karyotype Total Counted: 20 Total Analyzed: 8

Total Karyogrammed: 4 Band Resolution: 400 - 450

Interpretation:

This is a normal karyotype; no clonal abnormalities were detected at the stated band level of resolution.

Completed by: Reviewed and Interpreted by: Davena Lira, CG(ASCP) Vanessa Horner, PhD, FACMG

For internal use only

Date:	Sent By:	Sent To:	QC Review By:
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Limitations: This assay allows for microscopic visualization of numerical and structural chromosome abnormalities. The size of structural abnormality that can be detected is >3-10Mb, dependent upon the G-band resolution obtained from this specimen. For the purposes of this report, band level is defined as the number of G-bands per haploid genome. It is documented here as "band level", i.e., the range of bands determined from the four karyograms in this assay. Detection of heterogeneity of clonal cell populations in this specimen (i.e., mosaicism) is limited by the number of metaphase cells examined, documented here as "# of cells counted".

This assay was conducted solely for listed investigator/institution. The results of this assay are for research use only. Unless otherwise mutually agreed in writing, the services provided to you hereunder by WiCell Research Institute, Inc. ("WiCell") are governed solely by WiCell's Terms and Conditions of Service, found at www.wicell.org/privacyandterms. Any terms you may attach to a purchase order or other document that are inconsistent, add to, or conflict with WiCell's Terms and Conditions of Service are null and void and of no legal force or effect.



Short Tandem Repeat

Form SOP-89.01 Version 12.0

Requestor: WiCell Stem Cell Bank, WiCell Samples Received: 07Mar24, 08Mar24, 11Mar24, 14Mar24 STR Amplification Date: 20Mar24

	CBiPS-E12C1-	UCSD231i-	STAN305i-	STAN222i-	STAN306i-
Sample Name	PCBC-	SAD1-3-	<mark>865C2-DB44177</mark>	509C2-WB68276	865C3-DB44182
	WB68252 p22	WB68241 p33	<mark>p14</mark>	p15	p13
WiCell CTR No.1	101079	101091	101092	101094	101177
FGA					
ΤΡΟΧ					
D8S1179					
vWA					
Amelogenin					
Penta_D			Identifying		
CSF1PO			information has		
D16S539			been redacted to protect donor		
D7S820			confidentiality. If		
D13S317			more information is required,		
D5S818			please contact info@wicell.org		
Penta_E			inio@wiceii.org		
D18551					
D21S11					
TH01					
D3S1358					
Allelic Polymorphisms	27	26	25	28	25
		73332, 52284,			
Matches*		57678, 90755			
	76811	(96.67%)	101177	92544, 92545	101092
Comments					

*Note: The STR profile of the following sample is a 100% match for the given sample/samples unless otherwise specified.

¹ CTR No.: Characterization Test Request Number; also known as a laboratory accessioning number.



Short Tandem Repeat

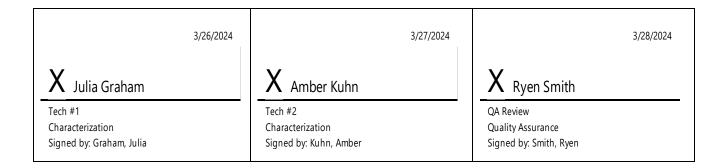
Requestor: WiCell Stem Cell Bank, WiCell Samples Received: 07Mar24, 08Mar24, 11Mar24, 14Mar24 STR Amplification Date: 20Mar24 Form SOP-89.01 Version 12.0

<u>Assay Description</u>: STR analysis is performed using the PowerPlex 16 HS System by Promega[™]. Results are reported as 13 CODIS STR markers, Amelogenin for gender determination and two low-stutter, highly discriminating pentanucleotide STR markers.

<u>Results</u>: The genotypic profiles comprise a range of 25-28 allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: The concentration of DNA required to achieve an acceptable STR genotype (signal/ noise) was equivalent to that required for the standard procedure (~1 ng/amplification reaction) from human genomic DNA. These results suggests that the cells submitted correspond to the cell lines as named and were not contaminated with any other human cells or a significant amount of mouse feeder layer cells.

Sensitivity: Sensitivity limits for detection of STR polymorphisms unique to either this or other human cell lines is ~2-4%.



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Mycoplasma Assay Report

PCR-based assay performed by WiCell WiCell Stem Cell Bank, WiCell 13Mar24

Sample Name	Result	Interpretation
UCSD231i-SAD1-3-WB68241 p33 (101091)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
STAN305i-865C2-DB44177 p14 (101092)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
STAN222i-509C2-WB68276 p15 (101094)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
Positive (+) Control	Positive	
Negative (-) Control	Negative	

Assay Description
Sample is tested for presence of mycoplasma using EZ-PCRTM Mycoplasma Detection Kit (Sartorius).

3/13/2024	3/13/2024	3/15/2024
${\sf X}$ John Raff	X Michael Mussar	X Andy Arntz
Tech #1 Characterization Signed by: Raff, John	Tech #2 Characterization Signed by: Mussar, Michael	QA Review Quality Assurance Signed by: Arntz, Andy

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A gel image is available upon request.

Native Product Sterility Report



		SAMPLE #:	24030270
Accounting@wicell.org		DATE RECEIVED:	07-Mar-24
504 S Rosa Road, Rm 101		TEST INITIATED:	07-Mar-24
Madison, WI 53719		TEST COMPLETED:	21-Mar-24
	14/4 00 PB (022 4		
SAMPLE NAME / DESCRIPTION:	WA09-RB68234		
	WA09-RB68235		
	UCSD231i-SAD1-3-WB68241		
	UCSD234i-SAD2-3-WB68246		
	CBiPS-E12C1-PCBC-WB68252		
	JHU191i-WB68245		
	UCSD087i-6-4-WB68251		
	CBiPS-6.2-PCBC-WB68269		
	hIPSC-Di21-c2-4-4-WB68256		
	STAN222i-509C2-WB68276		
	WC032i-6007-1-WB68273		
	iPS DF19-9-7T-WB68268		
	STAN173i-368C2-DB37978		
	STAN305i-865C2-DB44177		
	STAN306i-865C3-DB44182		
	STAN254i-647C3-DB44629		
	STAN253i-647C1-DB44626		
	STAN107i-121C2-DB35873		
	STAN263i-703C1-DB35850		
	STAN264i-703C2-DB35853		
UNIQUE IDENTIFIER:	N/A		

TEST RESULTS:	# Tested	# Positives (Growth)	- Control
	20	0	2 Negatives

TEST SUMMARY:

# Samples	Media Type	Volume (mL)	Incubation Temperature (° C)	Incubation Duration (Days)
20	TSB	40	20-25	14
20	FTG	40	30-35	14

REFERENCE:

PD #:

TEST METHODOLOGY:

Processed according to LAB-003: Sterility Test Procedure 000053 USP - Direct Transfer

Native Product Sterility Report



COMMENTS: Sample#

Sample# 24030270

AUTHORIZED BY

DATE 28MA

Specific test results may not be indicative of the characteristics of any other samples from the same lot or similar lots. This test report shall not be reproduced, except in full, without prior written approval. Liability is limited to the costs of the tests. Results applied to samples as received.