

Certificate of Analysis

Thaw and Culture Details

Cell Line Name	STAN248i-617C1		
WiCell Lot Number	DB35488		
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 2 wells of a 6 well plate using TeSR [™] Plus and Matrigel [®] . WiCell recommends thawing using ROCK Inhibitor for best results.		
Protocol	WiCell Feeder Independent Pluripotent	Stem Cell Protocol	
Culture Platform Prior to Freeze	Medium: mTeSR [™] 1 Matrix: Matrigel [®]		
Passage Number	p13 Cells were cultured for 13 passages prior to freeze and post colony selection. Plated cells at thaw should be labeled passage 14.		
Date Vialed	10-December-2015		
Vial Label	ISSMS 617i C1P13 ITA 121015		
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.		



Certificate of Analysis

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	Results: 46,XX Interpretation: Tresolution.	his is a normal karyotype; no clonal abnorm	nalities were detected at the stated band leve	l of
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
- Whole Genome Sequencing
- Infinium® Expanded Multi-Ethnic Genotyping Array (MEGAEX)

Approval Date	WiCell Quality Assurance Approval
26-August-20201	8/26/2021 X JKG JKG WG-Il Quality Assurance Signed by Gay, Anna



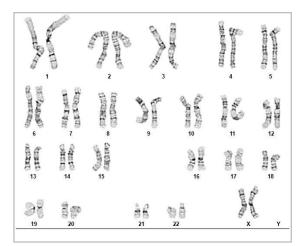
Chromosome Analysis Report: 086541

Date Reported: Thursday, June 17, 2021

Cell Line: STAN248i-617C1-DB35488

Submitted Passage #: 15
Date of Sample: 6/4/2021
Specimen: Human IPSC

Results: 46,XX



Cell Line Sex: Female

Reason for Testing: LOT_RELEASE

Investigator: WiCell Stem Cell Bank, WiCell

Cell: 4

Slide: G03

Slide Type: Karyotype

Total Counted: 20
Total Analyzed: 8

Total Karyogrammed: 4

Band Resolution: 500 - 550

Interpretation:

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

Completed by: Kate Bird, CG(ASCP)

Reviewed and Interpreted by: Vanessa Horner, PhD, FACMG

Date:	Sent By:	Sent To:	QC Review By:

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

Requestor: WiCell Stem Cell Bank, WiCell Samples Received: 03Jun21, 04Jun21 STR Amplification Date: 07Jun21

Sample Name	STAN249i- 617C2- DB35491 p15	STAN151i- 303C3- DB35736 p18	STAN248i- 617C1- DB35488 p15	PENN122i-627- 5-DB36632 p15	
Label on tube	86519	86540	86541	86542	
FGA					
TPOX					
D8S1179					
vWA					
Amelogenin					
Penta_D			ntifying rmation has		
CSF1PO		been redacted to			
D16S539			ect donor fidentiality. If		
D7S820		more information			
D13S317	is required, please contact				
D5S818	info@wicell.org				
Penta_E					
D18S51					
D21S11					
TH01					
D3S1358					
Allelic Polymorphisms	27	27	27	28	
Matches*					
Comments					

^{*}Note: The STR profile of the following sample is an exact match for the given sample/samples.



Short Tandem Repeat

Form SOP-89.01 Version 5.0

Requestor: WiCell Stem Cell Bank, WiCell Samples Received: 03Jun21, 04Jun21 STR Amplification Date: 07Jun21

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

Results: The genotypic profiles comprise a range of 27-28 allelic polymorphisms across the 15 STR loci analyzed.

<u>Interpretation:</u> 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 ~2-5%.

	6/9/2021	6/10/2021	6/10/2021
X Callum Walker		X Amber Kuhn	X Dawn Graham
Tech #1 Characterization Signed by: Walker, Callum		Tech #2 Characterization Signed by: Kuhn, Amber	QA Review Quality Assurance Signed by, Graham Dawn

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Raw data is available upon request.



Mycoplasma Assay Report

FORM SOP-83.01 Version 3.0

PCR-based assay performed by WiCell WiCell 01Jun21

Sample Name	Result	Interpretation
STAN151i-303C3-DB35736 p16 (86448)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
STAN248i-617C1-DB35488 p14 (86449)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
STAN249i-617C2-DB35491 p14 (86450)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
Positive (+) Control	Positive	
Negative (-) Control	Negative	

6/1/2021 6/2/2021 6/3/2021

X Hannah Rueth

Tech #1 Characterization Signed by: Rueth, Hannah X Callum Walker

Tech #2 Characterization Signed by: Walker, Callum X Dawn Graham

QA Review
Quality Assurance
Signed by: Graham Dawn

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A gel image is available upon request.

Native Product Sterility Report



SAMPLE #:

21070812

DATE RECEIVED:

14-Jul-21

TEST INITIATED:

27-Jul-21

TEST COMPLETED:

10-Aug-21

SAMPLE NAME / DESCRIPTION:

504 S Rosa Road, Rm 101

Madison, WI 53719

WiCell

CREM017i-SS19-1-WB67673 PENN042i-258-12-WB67671 UCSD239i-APP2-1-WB67672 STAN151i-303C3-DB35736 STAN248i-617C1-DB35488 STAN249i-617C2-DB35491

WA01-WB67657 WA01-WB67656

STAN366i-282C2-WB67655

SCRP5803i-DB42982 SCRP6101i-DB42990 SCRP6904i-DB43007 SCRP7301i-DB43010 HVRDi001-A-WB67674 SCRP8105i-DB43117 SCRP8305i-DB43120 SCRP8503i-DB43126 SCRP8601i-DB43129 SCRP8717i-DB43132 SCRP8901i-DB43135

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:

Processed according to LAB-003: Sterility Test Procedure

PD #:

000053

TEST METHODOLOGY:

USP - Direct Transfer

STERIS 9303 West Broadway Ave Brooklyn Park, MN 55445

LAB-003 rev 35 Form 5 Effective: APR 06, 2021 Page 1 of 2

Native Product Sterility Report



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Sample # 21070812

REVIEWED BY DATE 13 pug 2021

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.