



Certificate of Analysis

Thaw and Culture Details

Cell Line Name	STAN017i-171-1	
WiCell Lot Number	WB67798	
Parent Material	STAN017i-171-1-DB31059	
Provider/Client	Stanford University – Laboratory of Dr. Marlene Rabinovitch	
Banked By	WiCell	
Thaw and Culture Recommendations	WiCell recommends thawing 1 vial into 3 wells of a 6 well plate using TeSR™ - E8™ and Matrigel®.	
Protocol	WiCell Feeder Independent Pluripotent Stem Cell Protocol	
Culture Platform Prior to Freeze	Medium: TeSR™ -E8™	Matrix: Matrigel®
Passage Number	p20 Cells were cultured for 19 passages prior to freeze and post reprogramming. Plated cells at thaw should be labeled passage 20.	
Date Vialied	13-October-2021	
Vial Label	STAN017i-171-1 p20 WB67798	
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
Karyotype	WiCell	G-T-L Banding performed on 20 metaphase cells	Expected karyotype	See Report
	Results: 46,XX 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	≥ 15 Undifferentiated Colonies prior to passage, ≤ 30% Differentiation prior to passage, and 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

Approval Date	WiCell Quality Assurance Approval
01-December-2021	<p style="text-align: right;">7/19/2023</p> <p>X Ryen Smith</p> <p><small>JRG WiCell Quality Assurance Signed by Smith, Ryen</small></p>

Date Reported: Friday, October 29, 2021

Cell Line Sex: Female

Cell Line: STAN017i-171-1-WB67798

Reason for Testing: LOT_RELEASE

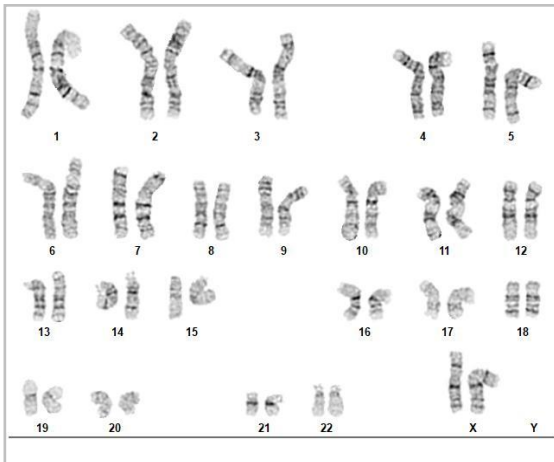
Submitted Passage #: 20

Date of Sample: 10/22/2021

Investigator: WiCell Stem Cell Bank, WiCell

Specimen: Human iPSC

Results: 46,XX



Cell: 7

Slide: G02

Slide Type: Karyotype

Total Counted: 20

Total Analyzed: 8

Total Karyogrammed: 4

Band Resolution: 400 - 425

Interpretation:

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

Completed by: Timm Gonzales, CG(ASCP)

Reviewed and Interpreted by: Kaitlin C. Lenhart, PhD, DABMGG

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

Form SOP-89.01

Version 7.0

Requestor: WiCell Stem Cell Bank, WiCell

Samples Received: 22Oct21, 24Oct21, 25Oct21, 27Oct21, 29Oct21

STR Amplification Date: 03Nov21

Sample Name	STAN017i-171-1-WB67798 p20						
Label on tube	89323						
FGA	Identifying information has been redacted to protect donor confidentiality. If more information is required, please contact info@wicell.org						
TPOX							
D8S1179							
vWA							
Amelogenin							
Penta_D							
CSF1PO							
D16S539							
D7S820							
D13S317							
D5S818							
Penta_E							
D18S51							
D21S11							
TH01							
D3S1358							
Allelic Polymorphisms	26	27	27	27	27	27	27
Matches*		See Matches Comments	See Matches Comments	See Matches Comments	See Matches Comments	See Matches Comments	See Matches Comments
Comments							

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



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Label on tube						
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D16S539						
D7S820						
D13S317						
D5S818						
Penta_E						
D18S51						
D21S11						
TH01						
D3S1358						
Allelic Polymorphisms	27	27	27	27	27	27
Matches*	See Matches Comments	See Matches Comments	See Matches Comments	See Matches Comments	See Matches Comments	See Matches Comments
Comments						

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



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STR Amplification Date: 03Nov21

Assay Description: 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.

Results: The genotypic profiles comprise a range of 26-27 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 ~2-5%.

Matches: 89329, 89330, 89331, 89333, 89345, 89346, 89397, 89398, 89399, 89436, 89437, and 89438 are all matches to each other and to additional profiles. Additional matches can be provided upon request.

11/17/2021	11/11/2021	11/11/2021
<p>X Molly Miles</p> <hr/> <p>Tech #1 Characterization Signed by: Miles, Molly</p>	<p>X Amber Kuhn</p> <hr/> <p>Tech #2 Characterization Signed by: Kuhn, Amber</p>	<p>X Dawn Graham</p> <hr/> <p>QA Review Quality Assurance Signed by: Graham, Dawn</p>

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Mycoplasma Assay Report

PCR-based assay performed by WiCell

WiCell
26Oct21

FORM SOP-83.01

Version 3.0

Sample Name	Result	Interpretation
STAN017i-171-1-WB67798 p20 (89323)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
Positive (+) Control	Positive	
Negative (-) Control	Negative	

10/26/2021

10/26/2021

10/28/2021

X Justin Hobson

Tech #1
Characterization
Signed by: Hobson, Justin

X Amber Kuhn

Tech #2
Characterization
Signed by: Kuhn, Amber

X Dawn Graham

QA Review
Quality Assurance
Signed by: Graham Dawn

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A gel image is available upon request.

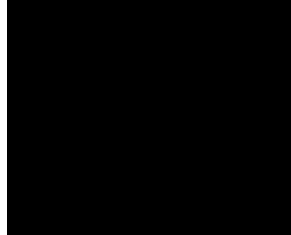
Native Product Sterility Report



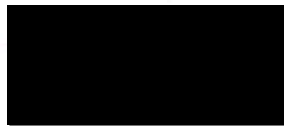
WiCell
504 S Rosa Road, Rm 101
Madison, WI 53719

SAMPLE #: 21110290
DATE RECEIVED: 04-Nov-21
TEST INITIATED: 05-Nov-21
TEST COMPLETED: 19-Nov-21

SAMPLE NAME / DESCRIPTION: STAN017i-171-1-WB67798
UCSD239i-APP2-1-WB67797



WA09-WB67800
WC007i-FX13-2-WB67802



PENN067i-312-1-DB34697
PENN168i-M16-1-DB36487
PENN065i-553-2-DB35135
PENN092i-560-3-DB36294
PENN093i-16-7-DB35023
PENN094i-161-1-DB34681

UNIQUE IDENTIFIER: N/A

TEST RESULTS:

# Tested	# Positives (Growth)	- Control
19	0	2 Negatives

TEST SUMMARY:

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

Native Product Sterility Report



REFERENCE: Processed according to LAB-003: Sterility Test Procedure

PD #: 000053

TEST METHODOLOGY: USP - Direct Transfer

COMMENTS: NA

REVIEWED BY

A handwritten signature in blue ink, appearing to read "G. Miller", written over a horizontal line.

DATE 22 NOV 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.