

Thaw and Culture Details

Cell Line Name	STAN100i-108C4				
WiCell Lot Number	WB67324				
Provider	Stanford University – Laboratory of Dr. Thomas Quetermous				
Banked By	WiCell				
Thaw and Culture Recommendations	WiCell recommends thawing 1 vial into 3 wells of a 6 well plate.				
Culture Platform	Feeder Independent				
	Medium: mTeSR™1				
	Matrix: Matrigel®				
Protocol	WiCell Feeder Independent mTeSR™1 Protocol				
Passage Number	p14 These cells were cultured for 13 passages prior to freeze and post colony selection. WiCell adds +1 to the passage number at freeze to best represent the overall passage number of the cells at thaw. Plated cells at thaw should be labeled passage 14.				
Date Vialed	08-October-2019				
Vial Label	STAN100i-108C4 p14 WB67324				
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.				

Testing Performed by WiCell

Test Description	Test Provider	Test Method	Test Specification	Result
Karyotype by G-banding	WiCell	SOP-CH-003	Expected karyotype	See Report
Post-Thaw Viable Cell Recovery	WiCell	SOP-CH-305	 ≥ 15 Undifferentiated Colonies prior to passage, ≤ 30% Differentiation prior to passage, and recoverable attachment after passage 	Pass
Identity by STR	UW Translational Research Initiatives in Pathology Laboratory	PowerPlex 16 HS System by Promega	Consistent with STR profile of deposited cell line	Pass
Sterility	Steris	ST/07	Negative	Pass
Mycoplasma	WiCell	SOP-CH-044	Negative	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

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Approval Date	Quality Assurance Approval		
05-December-2019	7/18/0023		

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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.



Date Reported: Wednesday, October 23, 2019 Cell Line: STAN100i-108C4-WB67324 15080 Passage#: 14 Date of Sample: 10/17/2019 Specimen: Human IPSC Results: 46,XY Cell Line Sex: Male Reason for Testing: Lot release testing

Investigator:

, WiCell



Cell: 22
Slide: G01
Slide Type: Karyotype
Total Counted: 20
Total Analyzed: 8
Total Karyogrammed: 4
Band Resolution: 450 - 575

Interpretation:

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

Completed by:		, CG(ASCP)	
Reviewed and Interpreted by:		, Ph.D.	
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 or effect.

TRIPath

HISTOLOGY - IHC - MOLECULAR - IMAGING

Department of Pathology and Laboratory Medicine TRIP Laboratory (Molecular) https://research.pathology.wisc.edu/trip-home/ (608) 265-9168

Sample Report:

15080-STR Sample Name on Tube: 15080-STR 40.3 ng/ μ L, (A260/280=1.80) Sample Type: Cells Cell Count: ~2 million cells

Short Tandem Repeat Analysis

Requestor:

WiCell Research Institute Quality Assurance Department



characterization@wicell.org (608) 316-4145

Receive Date: 10/21/19 **Report Sent:** 10/24/19 **Assay Date:** 10/22/19 **File Name:** STR 191023 wmr **Report Date:** 10/25/19

STR Locus	STR Genotype Repeat #	STR Genotype
FGA	16–18,18.2,19,19.2,20,20.2,21,21.2,22, 22.2, 23, 23.2, 24, 24.2, 25, 25.2, 26–30, 31.2, 43.2, 44.2,45.2, 46.2	Identifying information has
ТРОХ	6-13	been redacted to
D8S1179	7-18	protect donor
vWA	10-22	confidentiality. If
Amelogenin	X,Y	more information
Penta_D	2.2, 3.2, 5, 7-17	is required,
CSF1PO	6-15	-please, contact - <mark>WiCell's Technical</mark>
D16S539	5, 8-15	Support.
D7S820	6-14	
D13S317	7-15	
D5S818	7-16	
Penta_E	5-24	
D18S51	8-10, 10.2, 11-13, 13.2, 14-27	
D21S11	24,24.2,25,25.2,26-28,28.2,29,29.2, 30, 30.2,31, 31.2,32,32.2,33,33.2, 34,34.2,35,35.2,36-38	
TH01	4-9,9.3,10-11,13.3	
D3S1358	12-20	

<u>Results:</u> Based on the 15080-STR cells submitted by WiCell QA dated and received on 10/21/19, this sample (Label on Tube: 15080-STR) exactly matches the STR profile of the human cell line STAN100i-108C4 comprising 26 allelic polymorphisms across the 15 STR loci analyzed.

<u>Interpretation:</u> No STR polymorphisms other than those corresponding to the human STAN100i-108C4 cell line were detected and 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. This result suggests that the 15080-STR sample submitted corresponds to the STAN100i-108C4 cell line and was not contaminated with any other human cells or a significant amount of mouse feeder layer cells.

<u>Sensitivity</u>: Sensitivity limits for detection of STR polymorphisms unique to either this or other human cell lines is ~2-5%.

X RMB	Digitally Signed on	10/25/19	X WMR	Digitally Signed on	10/25/19
TRIP La	, BA boratory, Molecular		UWHC Mole	, PhD, Director / Co-Direc cular Diagnostics Laboratory / UW	

Testing was accomplished by analysis of human genetic polymorphisms at STR loci. This methodology has not yet been approved by the FDA and is for investigational use only. Acknowledge TRIP in your publications, posters & presentations. For details, see: https://research.pathology.wisc.edu/acknowledging-trip/ 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 https://www.wicell.org/media.acux/ca76d97c-862a-43f3-b02a-ab2d1e619100. 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.

Native Product Sterility Report



				SAMPLE #:	19102854
WiCell			ĺ	DATE RECEIVED:	31-Oct-19
504 S Rosa Road, Rm 10	1			TEST INITIATED:	11-Nov-19
Madison, WI 53719			TE	ST COMPLETED:	25-Nov-19
SAMPLE NAME / DES	SCRIPTION:	WC058i-108-1-2-16 STAN255i-649C1 STAN256i-649C2 PENN005i-35-3 D PENN006i-149-1 PENN007i-765-3 PENN008i-77-5 D PENN012i-93-2 D	WB67324 15096 WB67325 1509 DB44436 15098 DB44439 15099 B36317 15100 DB36519 15101 DB36286 15102 B36507 15103 B34713 15104 B35089 15105	97	
UNIQUE IDENTIFIER	:	NA			
TEST RESULTS:	# Tested	# Positives (Growth)	- Control		
	10	0	2 Negatives		
TEST SUMMARY:	# Samples	Media Type	Volume (mL)	Incubation Temperature (° C)	Incubation Duration (Days)
	10	TSB	40	20-25	14
	10	FTG	40	30-35	14
REFERENCE: PD #:		Processed according to LAB-003: Sterility Test Procedure 000053			

TEST METHODOLOGY:

REVIEWED BY

USP - Direct Transfer

COMMENTS:

NA

DATE 26NOV19

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.



Mycoplasma Assay Report

PCR-based assay performed by WiCell WiCell 23Oct19

Sample Name	Result	Comments/Suggestions
WC058i-108-1-2-16-WB67325 15081	Negative	
(78854)	Inegative	Band was not seen at 270bp, indicating the absence of mycoplasma.
STAN100i-108C4-WB67324 15080	Nagativa	
(78853)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
Positive (+) Control	Positive	
Negative (-) Control	Negative	

Reported by: Molly Miles, Cell Culture Specialist Reviewed by: Alex Paguirigan, Assistant Cell Culture Specialist

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A gel image is available upon request.