

Thaw and Culture Details

Cell Line Name	STAN038i-118-2
WiCell Lot Number	WB67197
Parent Material	STAN038i-118-2-DB30912
Provider	Stanford University – Laboratory of Dr. Marlene Rabinovitch
Banked By	WiCell
Thaw and Culture Recommendations	WiCell recommends thawing 1 vial into 2 wells of a 6 well plate.
Culture Platform	Feeder Independent
	Medium: TeSR [™] -E8 [™]
	Matrix: Matrigel®
Protocol	WiCell Feeder Independent E8 Medium Protocol
Passage Number	p13 These cells were cultured for 12 passages prior to freeze and post reprogramming. WiCell adds +1 to the passage number at freeze to best represent what the overall passage number of the cells at thaw. Plated cells at thaw should be labeled passage 13.
Date Vialed	23-May-2019
Vial Label	STAN038i-118-2 p13 WB67197
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		
	WiCell	SOP-CH-003	Expected karyotype	See Report		
	Results: 46,XX Nonclona					
Karyotype by G-banding	<i>Interpretation:</i> This is a normal karyotype; no clonal abnormalities were detected at the stated band level of resolution. There is a nonclonal finding, listed above. Nonclonal findings may result from technical artifact, but may be due to a developing clonal abnormality or to low-level mosaicism.					
Post-Thaw Viable Cell Recovery	WiCell	SOP-CH-305	 ≥ 15 Undifferentiated Colonies, ≤ 30% Differentiation and recoverable attachment after passage 	Pass		
Identity by STR	UW Translational Research Initiatives in Pathology Laboratory	PowerPlex 16 HS System by Promega	Defines profile	Pass		
Sterility	Steris	ST/07	Negative	Pass		
Mycoplasma	WiCell	SOP-CH-044	Negative	Pass		

Approval Date	Quality Assurance Approval	
02-July-2019	7/19/2023 KG Quality Assurance Signed by Smith, Ryen	

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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.



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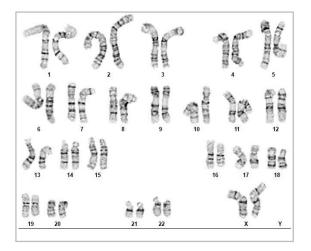


Date Reported: Tuesday, June 25, 2019 Cell Line: STAN038i-118-2-WB67197 14779 Passage#: 13 Date of Sample: 6/7/2019 Specimen: Human IPS Results: 46,XX Cell Line Sex: Female Reason for Testing: lot release testing

Investigator:

, WiCell

Nonclonal Findings: 47,XX,+11



Cell: 8 Slide: G02 Slide Type: Karyotype Total Counted: 20 Total Analyzed: 8 Total Karyogrammed: 4

Band Resolution: 425 - 475

Interpretation:

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

There is a nonclonal finding, listed above. Nonclonal findings may result from technical artifact, but may be due to a developing clonal abnormality or to low-level mosaicism.

Completed by:		, CG(ASCP)		
Reviewed and Interpreted by:		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.

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:

14779-STR Sample Name on Tube: 14779-STR 60.9 ng/μL, (A260/280=1.86) Sample Type: Cells Cell Count: ~2 million cells **Requestor:** WiCell Research Institute Cytogenetics Department

Short Tandem Repeat

Analysis



characterization@wicell.org (608) 316-4145

Receive Date: 06/17/19 **Report Sent:** 06/21/19 **Assay Date:** 06/18/19 **File Name:** STR 190620 wmr **Report Date:** 06/20/19

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
TPOX	6-13	information has
D8S1179	7-18	been redacted to
vWA	10-22	protect donor confidentiality. If
Amelogenin	X,Y	more information
Penta_D	2.2, 3.2, 5, 7-17	is required,
CSF1PO	6-15	please, contact
D16S539	5, 8-15	WiCell's Technical
D7S820	6-14	<u>Support.</u>
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 14779-STR cells submitted by WiCell Cytogenetics dated and received on 06/17/19, this sample (Label on Tube: 14779-STR) defines the STR profile of the human cell line STAN038i-118-2 comprising 27 allelic polymorphisms across the 15 STR loci analyzed.

<u>Interpretation:</u> No STR polymorphisms other than those corresponding to the human STAN038i-118-2 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 14779-STR sample submitted corresponds to the STAN038i-118-2 cell line and was not contaminated with any other human stem 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 06/21/19	X WMR	Digitally Signed on 06/21/19
, BA TRIP Laboratory, Molecular	UWHC Mole	, PhD, Director / Co-Director cular Diagnostics Laboratory / UWSMPH TRIP Laboratory

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



WiCell	DAT
504 S Rosa Road, Rm 101	TES
Madison, WI 53719	TEST

SAMPLE #:	19060913
DATE RECEIVED:	12-Jun-19
TEST INITIATED:	14-Jun-19
TEST COMPLETED:	28-Jun-19

SAMPLE NAME / DESCRIPTION:	STAN204i-448C1 WB67189 14791
	MCW013i-A2767 WB67191 14792
	JHU242i DB37058 14793
	MCW085i-40002118 WB67193 14794
	MCW081i-U7128 WB67194 14795
	STAN043i-124-1 WB67196 14796
	STAN038i-118-2 WB67197 14797
	MCW007i-U2456 WB67198 14798
	MCW096i-40000169 WB67199 14799
	MCW074i-40002460 WB67203 14800
	MCW110i-U2170 WB67204 14801
	STAN044i-124-2 WB67206 14802
	MCW105i-U2130 WB67207 14803
	MCW103i-40000237 WB67208 14804
	MCW101i-40001005 WB67209 14805
	hIPSC-Di21-c2-4-4 WB67210 14806
	WA07 WB67212 14807
	WA07 WB67213 14808
	MCW021i-50001743 WB67214 14809
	hIPSC-Di21-c2-4-3 WB67215 14810
UNIQUE IDENTIFIER:	NA

UNIQUE IDENTIFIER:

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

TEST SUMMARY	':
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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 accord	ling to LAB-003: St	terility Test Procedu	ire
PD #:		000053			

TEST METHODOLOGY:

USP - Direct Transfer

Native Product Sterility Report



COMMENTS:

NA

REVIEWED BY

DATE 28 JUNIG

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.

Na



Mycoplasma Assay Report

PCR-based assay performed by WiCell Lot Release Testing 04Jun19

#	Sample Name	Result	Comments/Suggestions
1	STAN038i-118-2-WB67197 14779	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma
2	Positive (+) Control	Positive	
3	Negative (-) Control	Negative	

 Reported by:
 Sondra Minter, Cell Culture Specialist

 Reviewed by:
 Katie Remondini, Cell Culture Specialist

 Date:______
 Sent By:_____
 Sent To_____

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A gel image is available upon request.