

Thaw and Culture Details

Cell Line Name	UCSD219i-117-1
WiCell Lot Number	WB59167
Provider	University of California, San Diego – Dr. Kelly Frazer
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	p18 These cells were cultured for 17 passages prior to freeze and post reprogramming. WiCell adds +1 to the passage number to best represent the overall passage number of the cells at thaw.
Date Vialed	06-February-2017
Vial Label	UCSD219i-117-1 p18 WB59167
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, ≤ 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

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.

- Illumina® HumanCoreExome BeadChip Array
- RNA-Seq
- Flow Cytometry (SSEA-4, Tra 1-81)
- Infinium[®] Expanded Multi-Ethnic Genotyping Array (MEGA^{EX})

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Approval Date	Quality Assurance Approval		
18-February-2017	HB Quality Assurance		

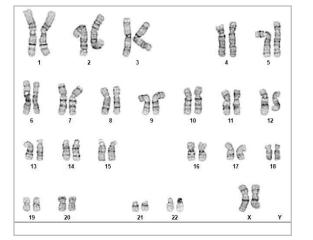
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The material provided under this certificate has been subjected to the tests specified and the results and data described herein are accurate based on WiCell's reasonable knowledge and belief. Appropriate Biosafety Level practices and universal precautions 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: Tuesday, May 28, 2019 Cell Line: UCSD219i-117-1-WB59167 14639 Passage#: 18 Date of Sample: 5/14/2019 Specimen: Human IPS Results: 46,XX Cell Line Sex: Female Reason for Testing: Lot Release Testing

Investigator: WiCell



Cell: 35
Slide: G02
Slide Type: Karyotype
Total Counted: 20
Total Analyzed: 8
Total Karyogrammed: 4
Band Resolution: 450 - 500

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:
 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 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:

14639-STR Sample Name on Tube: 14639-STR 685.0 ng/μL, (A260/280=2.01) Sample Type: Cells Cell Count: ~2 million cells

Short Tandem Repeat Analysis



characterization@wicell.org (608) 316-4145

Receive Date: 05/20/19 Report Sent: 05/24/19 Assay Date: 05/21/19 File Name: STR 190522 wmr Report Date: 05/23/19

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	Support.
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 14639-STR cells submitted by WiCell QA dated and received on 05/20/19, this sample (Label on Tube: 14639-STR) defines the STR profile of the human cell line UCSD219i-117-1 comprising 27 allelic polymorphisms across the 15 STR loci analyzed.

<u>Interpretation:</u> No STR polymorphisms other than those corresponding to the human UCSD219i-117-1 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 14639-STR sample submitted corresponds to the UCSD219i-117-1 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 05/24/19	X WMR	Digitally Signed on	05/24/19
, BA TRIP Laboratory, Molecular	UWHC Mole	PhD, Director / Co-Director cular Diagnostics Laboratory / UWS	

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.

Requestor: WiCell Research Institute Quality Assurance Department

Native Product Sterility Report



		SAMPLE #:	18010216
WiCell		DATE RECEIVED:	04-Jan-18
504 S. Rosa Rd., Rm 101		TEST INITIATED:	08-Jan-18
Madison, WI 53719		TEST COMPLETED:	22-Jan-18
SAMPLE NAME / DESCRIPTION:	UCSD140i-37-1 WB59010 13213		
	UCSD163i-95-1 WB58969 13214		
	UCSD172i-101-1 WB58971 13215		
	UCSD179i-27-1 WB58928 13216		
	UCSD212i-32-2 WB58930 13217		
	UCSD213i-14-1 WB58781 13218		
	UCSD214i-14-2 WB58929 13219		
	UCSD219i-117-1 WB59167 13220		
	UCSD200i-4-1 WB66717 13221		
	WISC012i-SCA WB66718 13222		
UNIQUE IDENTIFIER:	NA		
PRODUCT REGISTRATION:	Other: Human iPS cells		

TEST RESULTS:	# Tested	# Positives (Growth)	- Control
	10	0	2 Negatives

TEST S

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

REFERENCE:

METHOD VALIDATION / PD #:

TEST METHODOLOGY:

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

COMMENTS:

NA Mac **REVIEWED BY**

DATE 23JAINIS

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.



Mycoplasma Assay Report

PCR-based assay performed by WiCell Lot Release Testing 14May19

#	Sample Name	Result	Comments/Suggestions
1	UCSD219i-117-1-WB59167 14639	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
2	Positive (+) Control	Positive	
3	Negative (-) Control	Negative	

Reported by: Brenna Anderson, Research Specialist- Cytogenetics Reviewed by: Sondra Minter, Cell Culture Specialist

Date:______ Sent By:_____ Sent To___

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A gel image is available upon request.