



Thaw and Culture Details

Cell Line Name	UCSD179i-27-1
WiCell Lot Number	WB67348
Parent Material	UCSD179i-27-1-WB58928
Provider	University of California, San Diego – Dr. Kelly Frazer
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	p27 These cells were cultured for 26 passages prior to freeze and post reprogramming. 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 27.
Date Viald	22-November-2019
Vial Label	UCSD179i-27-1 p27 WB67348
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.

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

Approval Date	Quality Assurance Approval
16-January-2020	<div style="text-align: right; font-size: small;">1/16/2020</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">X JKG</div> <div style="font-size: x-small; margin-top: 2px;">JKG Quality Assurance Signed by: Gay, Jenna</div>



Chromosome Analysis Report: 079517

Date Reported: Friday, December 20, 2019

Cell Line: UCSD179i-27-1-WB67348 15202

Passage#: 27

Date of Sample: 12/16/2019

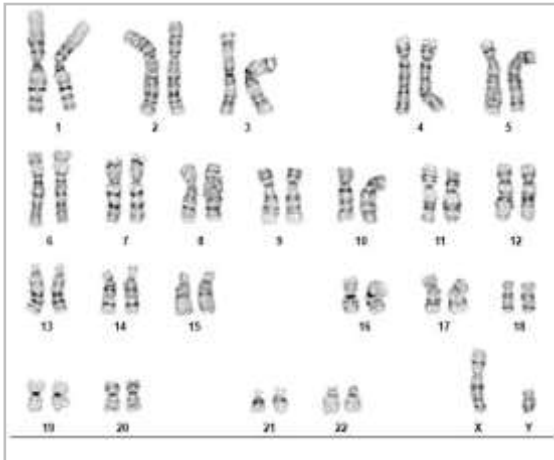
Specimen: Human iPSC

Results: 46,XY

Cell Line Sex: Male

Reason for Testing: Lot Release

Investigator: [REDACTED], WiCell



Cell: 22

Slide: G03

Slide Type: Karyotype

Total Counted: 20

Total Analyzed: 8

Total Karyogrammed: 4

Band Resolution: 400 - 500

Interpretation:

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

Completed by: [REDACTED], CG(ASCP)

Reviewed and Interpreted by: [REDACTED] 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 Analysis

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

characterization@wicell.org
 (608) 316-4145

Sample Report:
 15202-STR
Sample Name on Tube: 15202-STR
 97.0 ng/μL, (A260/280=1.78)
Sample Type: Cells
Cell Count: ~2 million cells

Requestor:
 WiCell Research Institute
 Quality Assurance Department

Receive Date: 12/19/19
Report Sent: 01/09/20
Assay Date: 01/07/20
File Name: STR 1200108 wmr
Report Date: 01/09/20

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 been redacted to protect donor confidentiality. If more information is required, please, contact WiCell's Technical Support .
TPOX	6-13	
D8S1179	7-18	
vWA	10-22	
Amelogenin	X,Y	
Penta_D	2.2, 3.2, 5, 7-17	
CSF1PO	6-15	
D16S539	5, 8-15	
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	

Results: Based on the 15202-STR cells submitted by WiCell QA dated and received on 12/19/19, this sample (Label on Tube: 15202-STR) matches the STR profile of the human cell line UCSD179i-27-1 with the exception of the D16S539 loci (10,11,13) where previously 10,13 had been observed. Standards for cell line authentication have been promoted with suggested algorithms to determine degrees of “relatedness” and have been recommended as a simple and effective way to interpret results from STR profiling of human cell lines. In general, ≥80% match is common between related samples, whereas ≤ 50% match is unrelated (Int. J. Cancer: 132, 2510-2519. 2013). Using this criteria, across the 15 microsatellite STR loci, determined the UCSD179i-27-1 (15202-STR) sample displays a 30/31 allelic match (97% match), thus we would call this sample a match to the previously established profile UCSD179i-27-1 (13210-STR). This line is comprised of 28 allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: In the human UCSD179i-27-1 cell line, a triploid genotype was detected at the D16S539 loci. Additionally, allelic imbalance (denoted by ** in the table above) was observed at the D16S539 loci. These observations could be the result of chromosomal gains, losses and/or amplifications in this cell line. 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 15202-STR sample submitted corresponds to the UCSD179i-27-1 cell line and was 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%.

X_{RMB} Digitally Signed on 01/09/20

X_{WMR} Digitally Signed on 01/09/20

BA
 TRIP Laboratory, Molecular

PhD, Director / Co-Director
 UWMC Molecular 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
504 S Rosa Road, Rm 101
Madison, WI 53719

SAMPLE #: 19120972
DATE RECEIVED: 12-Dec-19
TEST INITIATED: 17-Dec-19
TEST COMPLETED: 31-Dec-19

SAMPLE NAME / DESCRIPTION: PENN017i-638-2 DB36355 15187
UCSD179i-27-1 WB67348 15188
MIN20i-34363.A WB67349 15189
WISCI014-A-1 WB67353 15190
WISCI014-A-2 WB67354 15191
WISCI014-A-3 WB67355 15192
JHU188i WB67356 15193
SCR2305i WB67357 15194
WC061i-226-1-2-23 WB67359 15195
JHU199i WB67360 15196
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: Processed according to LAB-003: Sterility Test Procedure
PD #: 000053
TEST METHODOLOGY: USP - Direct Transfer

COMMENTS: NA

REVIEWED BY _____

DATE 31 Dec 19

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

13Dec19

FORM SOP-CH-048.01

Version A Edition 01

Sample Name	Result	Comments/Suggestions
UCSD179i-27-1-WB67348 15202 (79496)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MIN20i-34363.A-WB67349 15203 (79497)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
JHU188i-WB67356 15204 (79498)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MCW111i-40002422-WB67223 15155 (79499)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
Positive (+) Control	Positive	
Negative (-) Control	Negative	

Reported by: Hannah Rueth, Assistant Research Specialist

Reviewed by: Amber Kuhn, Assistant Research Specialist

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.

A gel image is available upon request.