



Thaw and Culture Details

Cell Line Name	MCW104i-U2175
WiCell Lot Number	WB67231
Parent Material	MCW104i-U2175-DB66412
Provider	Medical College of Wisconsin – Laboratory of Dr. Ulrich Broeckel
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: TeSR™-E8™
	Matrix: Matrigel®
Protocol	WiCell Feeder Independent E8 Medium Protocol
Passage Number	p16 These cells were cultured for 15 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 16.
Date Vialied	23-June-2019
Vial Label	MCW104i-U2175 p16 WB67231
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	Defines 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.

- Tra1-60 marker expression
- mRNA expression by qPCR
- Infinium® Expanded Multi-Ethnic Genotyping Array (MEGA^{EX})



Approval Date	Quality Assurance Approval
18-December-2019	<p style="text-align: right;">12/18/2019</p> <p>X _____ JKG Quality Assurance Signed by: Gay, Jenna</p>

Date Reported: Thursday, November 21, 2019

Cell Line Sex: Male

Cell Line: MCW104i-U2175-WB67231 15132

Reason for Testing: Lot Release

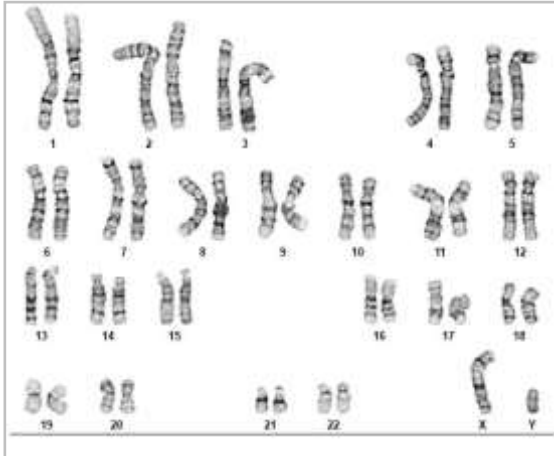
Passage#: 16

Date of Sample: 11/18/2019

Investigator: [REDACTED], WiCell

Specimen: Human iPSC

Results: 46,XY



Cell: 13

Slide: G03

Slide Type: Karyotype

Total Counted: 20

Total Analyzed: 8

Total Karyogrammed: 4

Band Resolution: 400 - 475

Interpretation:

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

Completed by: [REDACTED]

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.

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:

15132-STR
Sample Name on Tube: 15132-STR
56.4 ng/ μ L, (A260/280=1.70)
Sample Type: Cells
Cell Count: ~2 million cells

Requestor:

WiCell Research Institute
Quality Assurance Department

Receive Date: 11/21/19

Report Sent: 12/06/19
Assay Date: 12/03/19
File Name: STR 191204 wmr
Report Date: 12/06/19

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 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 15132-STR cells submitted by WiCell QA dated and received on 11/21/19, this sample (Label on Tube: 15132-STR) defines the STR profile of the human cell line MCW104i-U2175 comprising 27 allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: No STR polymorphisms other than those corresponding to the human MCW104i-U2175 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 15132-STR sample submitted corresponds to the MCW104i-U2175 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 12/06/19

X *WMR*

Digitally Signed on 12/06/19

██████████, BA
TRIP Laboratory, Molecular

██████████, PhD, Director / Co-Director
UWHC Molecular Diagnostics Laboratory / UWSPH 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/>
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Native Product Sterility Report



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

SAMPLE #: 19070830
DATE RECEIVED: 11-Jul-19
TEST INITIATED: 17-Jul-19
TEST COMPLETED: 31-Jul-19

SAMPLE NAME / DESCRIPTION: SCRP2503i DB42072 14868
SCR2506i DB42076 14869
SCR2409i DB42066 14870
SCR2411i DB42069 14871
JHU229i DB37022 14872
JHU232i DB37035 14873
JHU242i DB37058 14874
JHU246i DB37106 14875
JHU251i DB37118 14876
JHU253i DB37125 14877
WC047i-17097-01-36 WB67236 14878
LUEL8679i-4 WB67230 14879
MCW107i-40000886 WB67227 14880
HIPSC-Tri21-c2-4 WB67228 14881
HIPSC-Tri21-c2-4 WB67229 14882
SCR2106i DB42037 14883
SCR2211i DB42051 14884
MCW104i-U2175 WB67231 14885
MCW113i-U7145 WB67243 14886
STAN217i-496C2 DB35538 14887

UNIQUE IDENTIFIER: NA

TEST RESULTS:

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

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 according to LAB-003: Sterility Test Procedure

PD #: 000053

TEST METHODOLOGY: USP - Direct Transfer

Native Product Sterility Report



COMMENTS: Sample # 19070830

REVIEWED BY

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

DATE

31 Jul 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

18Nov19

FORM SOP-CH-048.01

Version A Edition 01

Sample Name	Result	Comments/Suggestions
STAN140i-243C1-WB67329 15131 (79086)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
JHU050i-WB67328 15138 (79087)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MIN13i-33362.D-WB67326 15130 (79088)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MCW092i-U2390-WB67175 15113 (79089)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MCW104i-U2175-WB67231 15132 (79090)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MCW094i-U7120-WB67177 15112 (79114)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MCW105i-U2130-WB67207 15133 (79115)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
Positive (+) Control	Positive	
Negative (-) Control	Negative	

Reported by: Amber Kuhn, Assistant Research Specialist

Reviewed by: Hannah Rueth, Assistant Research Specialist

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A gel image is available upon request.