



Thaw and Culture Details

Cell Line Name	MCW096i-4000169
WiCell Lot Number	WB67199
Parent Material	MCW096i-4000169-DB66404
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 Viald	22-May-2019
Vial Label	MCW096i-4000169 p16 WB67199
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
16-January-2020	<p style="text-align: right;">1/16/2020</p> <p>X <u>JKG</u></p> <p>JKG Quality Assurance Signed by Gay, Jemina</p>

Date Reported: Friday, December 13, 2019

Cell Line Sex: Male

Cell Line: MCW096i-40000169-WB67199
15161

Reason for Testing: Lot release testing

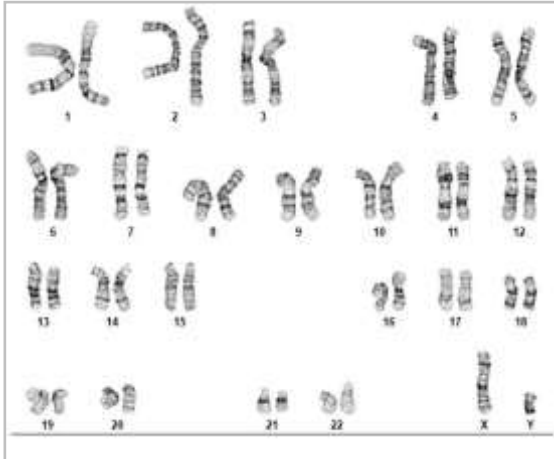
Passage#: 16

Date of Sample: 12/11/2019

Investigator: [REDACTED], WiCell

Specimen: Human iPSC

Results: 46,XY



Cell: 3

Slide: G03

Slide Type: Karyotype

Total Counted: 20

Total Analyzed: 8

Total Karyogrammed: 4

Band Resolution: 350 - 450

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], 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 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:

15161-STR
Sample Name on Tube: 15161-STR
101.9 ng/μL, (A260/280=1.80)
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 15161-STR cells submitted by WiCell QA dated and received on 12/19/19, this sample (Label on Tube: 15161-STR) defines the STR profile of the human cell line MCW096i-40000169 comprising 27 allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: No STR polymorphisms other than those corresponding to the human MCW096i-40000169 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 15161-STR sample submitted corresponds to the MCW096i-40000169 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
UWHC 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/>
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Native Product Sterility Report



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

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

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



Mycoplasma Assay Report

PCR-based assay performed by WiCell

WiCell

12Dec19

FORM SOP-CH-048.01

Version B Edition 01

Sample Name	Result	Comments/Suggestions
WC068i-310-17-2-36-DB67343 15198 (79400)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
WC065i-247-1-2-32-DB67338 15197 (79401)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
WC071i-335-1-2-35-DB67346 15199 (79402)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
STAN099i-108C2-DB44602 15200 (79403)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MCW085i-40002118-WB67193 15109 (79405)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MCW082i-U2052-WB67222 15108 (79406)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MCW095i-U2311-WB67185 15160 (79407)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MCW103i-40000237-WB67208 15158 (79408)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MCW096i-40000169-WB67199 15161 (79409)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
Positive (+) Control	Positive	
Negative (-) Control	Negative	

Reported by: Alex Paguirigan, Assistant Cell Culture Specialist

Reviewed by: Katie Remondini, Cell Culture Specialist

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A gel image is available upon request.