

Thaw and Culture Details

Cell Line Name	MCW063i-40000190
WiCell Lot Number	WB67164
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 Vialed	23-April-2019
Vial Label	MCW063i-40000190 p16 WB67164
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	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 gPCR
- Infinium® Expanded Multi-Ethnic Genotyping Array (MEGAEX)



Approval Date	Quality Assurance Approval		
12-May-2018	9/16/2019 X JKG JKG Quality Assurance Signed by Gay, Jenna		



Chromosome Analysis Report: 078108

Date Reported: Friday, September 6, 2019	Cell Line Sex: Male
Cell Line: MCW063i-40000190-WB67164 14966	Reason for Testing: lot release testing
Passage#: 16	
Date of Sample: 8/28/2019	Investigator: , WiCell
Specimen: Human IPSC	
Results: 46,XY	
Rille of te	Cell· 11

Cell: 11 Slide: G01

Slide Type: Karyotype

Total Counted: 20
Total Analyzed: 8

Total Karyogrammed: 4
Band Resolution: 450 - 550

Interpretation:

This is a normal	karyoty	oe; no clo	nal a	bnormalities	were dete	cted	at t	the sta	ted	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 are null and void and of no legal force or effect.



TRIP Laboratory (Molecular)

Short Tandem Repeat Analysis HISTOLOGY - IHC - MOLECULAR - IMAGING



characterization@wicell.org (608) 316-4145

Sample Report:

(608) 265-9168

14966-STR Sample Name on Tube: 14966-STR

Department of Pathology and Laboratory Medicine

https://research.pathology.wisc.edu/trip-home/

 $75.7 \text{ ng/}\mu\text{L}$, (A260/280=1.86)

Sample Type: Cells

Cell Count: ~2 million cells

Requestor:

WiCell Research Institute Quality Assurance Department **Receive Date:** 09/03/19 **Report Sent:** 09/09/19 **Assav Date:** 09/03/19

File Name: STR 190904 wmr

Report Date: 09/09/19

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
TPOX	6-13	been redacted to
D8S1179	7-18	protect donor
vWA	10-22	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	

Results: Based on the 14966-STR cells submitted by WiCell QA dated and received on 09/03/19, this sample (Label on Tube: 14966-STR) defines the STR profile of the human cell line MCW063i-40000190 comprising 29 allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: No STR polymorphisms other than those corresponding to the human MCW063i-40000190 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 14966-STR sample submitted corresponds to the MCW063i-40000190 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 $\sim 2-5\%$.

X RMB	Digitally Signed on	09/09/19		X WMR	Digitally Signed on	09/09/19
, BA TRIP Laboratory, Molecular			UWHC Mole	 hD, Director / Co-Direc nostics Laboratory / UW	tor /SMPH TRIP Laboratory	

Native Product Sterility Report



SAMPLE #:

19050849

WiCell

504 S Rosa Road, Rm 101

Madison, WI 53719

DATE RECEIVED:

09-May-19

TEST INITIATED:

15-May-19

TEST COMPLETED:

29-May-19

SAMPLE NAME / DESCRIPTION:

MCW057i-A3286 B2M-/Etrimer Elf1

WB67153 WB67154 14647 14648

MCW033i-A7195

WB67156

14649

MCW061i-40000329

WB67157 WB67158 14650

MCW059i-40001067 MCW070i-40002330

WB67159

14651 14652

B2M-/- Elf1

WB67160

14653 14654

JHU210i WB67162 MCW052i-40001760

WB67163

14655

B2M-/Edimer Elf1 MCW063i-40000190 WB67155 WB67164 14656 14657

MCW063i-40000190 MCW065i-40001296

B2M-/Edimer(preCre)Elf1

WB67165

14658 14659

MCW069i-40000268 MCW093i-40000435 WB67167

WB67166

14660

MCW093i-40000435 PACS1003i-GM27161

WB67168 DB67161 14661 14662

STAN011i-123-1

DB31129

14663

STAN012i-123-2 STAN015i-178-1 DB31135 DB31094 14664 14665

STAN016i-178-2

DB31107

14666

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

STERIS Laboratories 9303 West Broadway Ave Brooklyn Park, MN 55445 LAB-003 rev 32 Form 5 Effective: Nov 29, 2018 Page 1 of 2

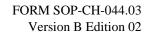
Native Product Sterility Report



C	OMN	/FN	TS	•	NA
\smile		A111.A		•	14/

REVIEWED BY	Man	DATE 29MAV19

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.



WiCell

Mycoplasma Assay Report

PCR-based assay performed by WiCell Lot Release Testing - 14966
28Aug19

#	Sample Name	Result	Comments/Suggestions
1	MCW063i-40000190-WB67164 14966	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma
2	Positive (+) Control	Positive	
3	Negative (-) Control	Negative	

Reported by: Molly Miles, Cell Culture Specialist Reviewed by: Katie Remondini, Cell Culture Specialist

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A gel image is available upon request.