Thaw and Culture Details

Cell Line Name	**MCW059i-40001067**
WiCell Lot Number	**WB67158**
Parent Material	MCW059i-40001067-DB66353
Provider	Medical College of Wisconsin – Laboratory of Dr. Ulrich Broeckel
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	p18 These cells were cultured for 17 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 18.
Date Vialed	16-April-2019
Vial Label	MCW059i-40001067 p18 WB67158
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
	Results: 46,XX,der(15)t(1;15)(q12;p11.2)[2]/46,XX[18] ***Interpretation:*** This is an abnormal karyotype. Two of twenty cells examined contain an unbalanced rearrangement of chromosome 15 in which an extra copy of the long (q) arm of chromosome 1 was translocated to the short (p) arm of chromosome 15. The derivative chromosome 15 results in loss of chromosome 15p and gain of chromosome 1q. Gain of chromosome 1q is a recurrent acquired abnormality in pluripotent stem cell cultures. No other clonal abnormalities were detected at the stated band level of resolution.			
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

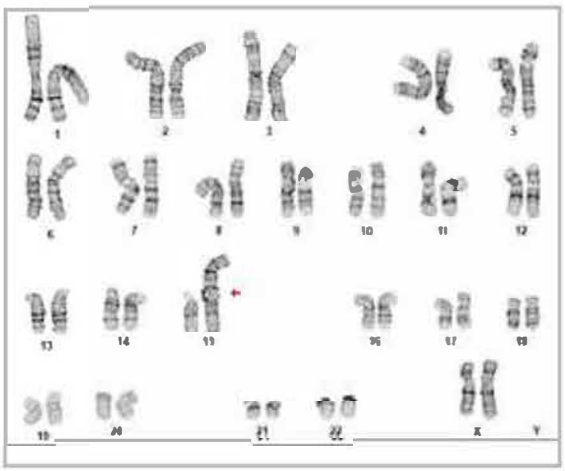
The Provider stated that some or all of the additional analyses listed below may have been performed for this cell line. For more information, publication and dbGaP links, where available, are provided on the cell line specific web page on the WiCell website.

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

Approval Date	Quality Assurance Approval
04-June-2020	6/4/2020 X JKG JKG Quality Assurance Signed by: Gay, Jenna

Chromosome Analysis Report: 078064

Date Reported: Tuesday, September 3, 2019
Cell Line Sex: Female
Cell Line: MCW059i-40001067-WB67158 14968
Reason for Testing: lot release testing
Passage#: 18
Date of Sample: 8/26/2019
Investigator: [redacted], WiCell
Specimen: Human IPSC
Results: 46,XX,der(15)t(1;15)(q12;p11.2)[2]/46,XX[18]



Cell: 23
Slide: G03
Slide Type: Karyotype

Total Counted: 20
Total Analyzed: 8
Total Karyogrammed: 4
Band Resolution: 425 - 550

Interpretation:

This is an abnormal karyotype. Two of twenty cells examined contain an unbalanced rearrangement of chromosome 15 in which an extra copy of the long (q) arm of chromosome 1 was translocated to the short (p) arm of chromosome 15. The derivative chromosome 15 results in loss of chromosome 15p and gain of chromosome 1q. Gain of chromosome 1q is a recurrent acquired abnormality in pluripotent stem cell cultures. No other 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".

Short Tandem Repeat Analysis

TRIPath
HISTOLOGY - IHC - MOLECULAR - IMAGING
Department of Pathology and Laboratory Medicine
TRIP Laboratory (Molecular)
https://research.pathology.wisc.edu/trip-home/
(608) 265-9168

WiCell
Your Lab Partner
characterization@wicell.org
(608) 316-4145

Sample Report:
14968-STR
Sample Name on Tube: 14968-STR
102.5 ng/µL, (A260/280=1.81)
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
Assay 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 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 14968-STR cells submitted by WiCell QA dated and received on 09/03/19, this sample (Label on Tube: 14968-STR) defines the STR profile of the human cell line MCW059i-40001067 comprising 29 allelic polymorphisms across the 15 STR loci analyzed.**

Interpretation: **No STR polymorphisms other than those corresponding to the human MCW059i-40001067 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 14968-STR sample submitted corresponds to the MCW059i-40001067 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 09/09/19**

[redacted], *BA*
TRIP Laboratory, Molecular

X *WMR* **Digitally Signed on 09/09/19**

[redacted], *PhD, Director / Co-Director*
UWHC Molecular Diagnostics Laboratory / UWSMPH TRIP Laboratory

Native Product Sterility Report

STERIS

SAMPLE #:	19050849
DATE RECEIVED:	09-May-19
TEST INITIATED:	15-May-19
TEST COMPLETED:	29-May-19

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

SAMPLE NAME / DESCRIPTION:

MCW057i-A3286 WB67153 14647
B2M−/Etrimer Elf1 WB67154 14648
MCW033i-A7195 WB67156 14649
MCW061i-40000329 WB67157 14650
MCW059i-40001067 WB67158 14651
MCW070i-40002330 WB67159 14652
B2M−/− Elf1 WB67160 14653
JHU210i WB67162 14654
MCW052i-40001760 WB67163 14655
B2M−/Edimer Elf1 WB67155 14656
MCW063i-40000190 WB67164 14657
MCW065i-40001296 WB67165 14658
B2M−/Edimer(preCre)Elf1 WB67166 14659
MCW069i-40000268 WB67167 14660
MCW093i-40000435 WB67168 14661
PACS1003i-GM27161 DB67161 14662
STAN011i-123-1 DB31129 14663
STAN012i-123-2 DB31135 14664
STAN015i-178-1 DB31094 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

Native Product Sterility Report

STERIS

COMMENTS: NA

REVIEWED BY _____ DATE 29MAY19

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

Lot Release Testing

26Aug19

FORM SOP-CH-044.03
Version B Edition 02

#	Sample Name	Result	Comments/Suggestions
1	MCW059i-40001067-WB67158 14968	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma
2	Positive (+) Control	Positive	
3	Negative (-) Control	Negative	

Reported by: [redacted], **Cell Culture Specialist**

Reviewed by: [redacted], **Cell Culture Specialist**

A gel image is available upon request.