



## Thaw and Culture Details

Cell Line Name	<b>MCW058i-U2082</b>
WiCell Lot Number	<b>WB67408</b>
Parent Material	MCW058i-U2082-DB66352
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	p17 These cells were cultured for 16 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 17.
Date Viald	07-February-2020
Vial Label	MCW058i-U2082 p17 WB67408
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
	<p><b>Results:</b> 45,X,-Y,der(21)t(1;21)(q12;p11.2)[6]/46,XY[14]  <b>Interpretation:</b> This is an abnormal karyotype. Six of twenty cells examined contain loss of chromosome Y and an unbalanced rearrangement of chromosome 21 in which an extra copy of the long (q) arm of chromosome 1 was translocated to the short (p) arm of chromosome 21. The derivative chromosome 21 results in loss of chromosome 21p 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.</p>			
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<sup>EX</sup>)

Approval Date	Quality Assurance Approval
18-June-2020	<div style="text-align: right; font-size: small;">6/18/2020</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;"><b>X</b> JKG</div> <div style="font-size: x-small; margin-top: 2px;">JKG Quality Assurance Signed by Gay, Jenna</div>

**Date Reported:** Tuesday, March 3, 2020

**Cell Line Sex:** Male

**Cell Line:** MCW058i-U2082-WB67408

**Reason for Testing:** LOT\_RELEASE

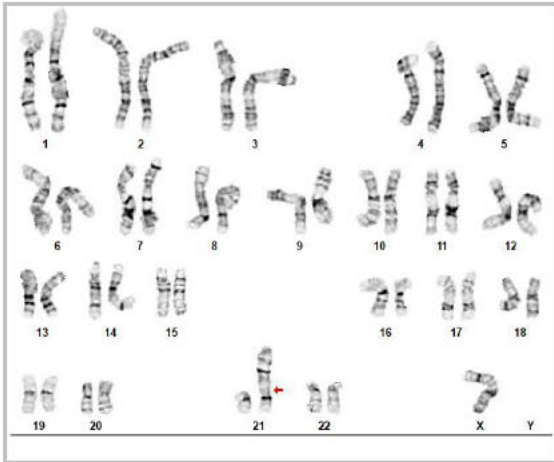
**Passage#:** 17

**Date of Sample:** 2/28/2020

**Investigator:** WiCell Stem Cell Bank, WiCell

**Specimen:** Human iPSC

**Results:** 45,X,-Y,der(21)t(1;21)(q12;p11.2)[6]/46,XY[14]



**Cell:** 3

**Slide:** G02

**Slide Type:** Karyotype

**Total Counted:** 20

**Total Analyzed:** 8

**Total Karyogrammed:** 4

**Band Resolution:** 450 - 475

**Interpretation:**

**This is an abnormal karyotype. Six of twenty cells examined contain loss of chromosome Y and an unbalanced rearrangement of chromosome 21 in which an extra copy of the long (q) arm of chromosome 1 was translocated to the short (p) arm of chromosome 21. The derivative chromosome 21 results in loss of chromosome 21p 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]

**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](http://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.*



HISTOLOGY - IHC - MOLECULAR - IMAGING

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

# Short Tandem Repeat Analysis



Your Lab Partner

[characterization@wicell.org](mailto:characterization@wicell.org)  
(608) 316-4145

**Sample Report:**

MCW058i-U2082-WB67408 p.17 D02 (80678)

**Sample Name on Tube:** MCW058i-U2082-WB67408 p.17 D02 (80678)  
96.9 ng/ $\mu$ L, (A260/280=1.76)

**Sample Type:** DNA

**Cell Count:** N/A

**Requestor:**

WiCell Research Institute

Characterization Department

**Receive Date:** 03/02/20

**Report Sent:** 03/14/20

**Assay Date:** 03/10/20

**File Name:** STR 200311wmr

**Report Date:** 03/14/20

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 <a href="#">WiCell's Technical Support</a> .
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 MCW058i-U2082-WB67408 p.17 D02 (80678) cells submitted by WiCell Characterization Department dated and received on 03/02/20, this sample (Label on Tube: MCW058i-U2082-WB67408 p.17 D02 (80678)) defines the STR profile of the human cell line MCW058i-U2082 comprising 26 allelic polymorphisms across the 15 STR loci analyzed.

**Interpretation:** No STR polymorphisms other than those corresponding to the human MCW058i-U2082 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 MCW058i-U2082-WB67408 p.17 D02 (80678) sample submitted corresponds to the MCW058i-U2082 cell line and was not contaminated with any other human stem 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 03/14/20

X *WMR*

Digitally Signed on 03/14/20

*[Redacted]*, BA  
TRIP Laboratory, Molecular

*[Redacted]*, 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



## CORRECTED REPORT

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

SAMPLE #: 20021177  
DATE RECEIVED: 20-Feb-20  
TEST INITIATED: 21-Feb-20  
TEST COMPLETED: 06-Mar-20

SAMPLE NAME / DESCRIPTION:	WC070i-335-1-2-30	WB67391
	JHU206i	WB67393
	MCW056i-U7076	WB67392
	MCW018i-A2868	WB67397
	MCW024i-A3263	WB67398
	MCW046i-U2346	WB67396
	STAN205i-448C2	WB67399
	STAN120i-192C2	WB67406
	MCW054i-U2073	WB67407
	MCW058i-U2082	WB67408
	MCW062i-U2157	WB67410
	MCW072i-40001708	WB67413
	MCW099i-40000558	WB67411
	MIN09i-33114.C	WB67412
	MCW051i-40001166	WB67409
	MCW079i-40001456	WB67414
	MCW055i-U2054	WB67416
	MCW098i-40002583	WB67417
	STAN206i-459C1	WB67418
	STAN130i-212C4	WB67415

UNIQUE IDENTIFIER: NA

### TEST RESULTS:

# Tested	# Positives (Growth)	- Control
20	0	3 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

# Native Product Sterility Report



REFERENCE: Processed according to LAB-003: Sterility Test Procedure

PD #: 000053

TEST METHODOLOGY: USP - Direct Transfer

COMMENTS: Sample #20021177

Report revised due to Customer request to update sample name.

REVIEWED BY

A handwritten signature in blue ink, consisting of a large, stylized 'C' followed by several loops and a long horizontal stroke.

DATE

10 MAR 2020

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  
26Feb20

FORM SOP-CH-048.01

Version B Edition 01

Sample Name	Result	Comments/Suggestions
MCW115i-U2143-WB67428 (80586)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
SCR5402i-WB67430 (80587)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MCW021i-50001743-WB67429 (80588)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MCW079i-40001456-WB67414 (80589)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MCW051i-40001166-WB67409 (80590)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MCW054i-U2073-WB67407 (80591)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MCW058i-U2082-WB67408 (80592)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
WISCe011-A-40-DB67422 (80635)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
Positive (+) Control	Positive	
Negative (-) Control	Negative	

Reported by: [REDACTED], Assistant Cell Culture Specialist

Reviewed by: [REDACTED], Cell Culture Specialist

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*A gel image is available upon request.*