



Thaw and Culture Details

Cell Line Name	MCW108i-U2165
WiCell Lot Number	WB67431
Parent Material	MCW108i-U2165-DB66416
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	21-February-2020
Vial Label	MCW108i-U2165 p17 WB67431
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
09-April-2020	4/9/2020 X JKG JKG Quality Assurance Signed by Gay, Jenna

Date Reported: Friday, March 13, 2020

Cell Line: MCW108i-U2165-WB67431

Passage#: 17

Date of Sample: 3/5/2020

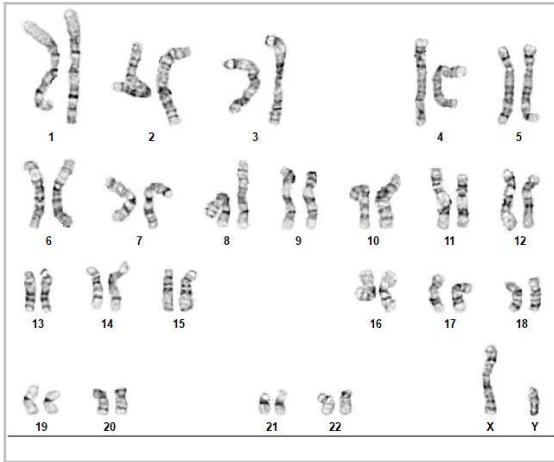
Specimen: Human IPSC

Results: 46,XY

Cell Line Sex: Male

Reason for Testing: LOT_RELEASE

Investigator: WiCell Stem Cell Bank, WiCell



Cell: 98

Slide: G01

Slide Type: Karyotype

Total Counted: 20

Total Analyzed: 8

Total Karyogrammed: 4

Band Resolution: 400 - 450

Interpretation:

This is a normal karyotype; no 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".

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.



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
(608) 316-4145

Sample Report:

MCW108i-U2165-WB67431 p.17 (80781)

32.1 ng/μL, (A260/280=1.64)

Sample Type: DNA

Cell Count: N/A

Requestor:

WiCell Research Institute
Characterization Department

Receive Date: 03/09/20

Report Sent: 03/16/20

Assay Date: 03/10/20

File Name: STR 200311 wmr

Report Date: 03/16/20

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 MCW108i-U2165-WB67431 p.17 (80781) DNA submitted by WiCell Characterization Department dated and received on 03/09/20, this sample (Label on Tube: MCW108i-U2165-WB67431 p.17 (80781)) defines the STR profile of the human cell line MCW108i-U2165 comprising 25 allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: No STR polymorphisms other than those corresponding to the human MCW108i-U2165 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 MCW108i-U2165 sample submitted corresponds to the MCW108i-U2165-WB67431 p.17 (80781) 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 03/16/20

_____, BA
TRIP Laboratory, Molecular

X_{WMR}

Digitally Signed on 03/16/20

_____, 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 #: 20030283
DATE RECEIVED: 05-Mar-20
TEST INITIATED: 06-Mar-20
TEST COMPLETED: 20-Mar-20

SAMPLE NAME / DESCRIPTION:

MCW021i-50001743	WB67429
MCW084i-U2053	WB67427
MCW115i-U2143	WB67428
SCR5402i	WB67430
MCW102i-UR117	WB67432
MCW108i-U2165	WB67431
CREM048i-BR3-1	DB66766
CREM049i-BR21-1	DB66767
CREM050i-BR23-1	DB66768
CREM061i-BT1-1	DB66780
CREM062i-BT2	DB66781
Elf1	WB67433
STAN133i-215C1	DB44608
STAN134i-215C2	DB44611
STAN291i-827C1	DB44304
STAN292i-827C2	DB44307
STAN251i-637C1	DB44371
STAN311i-906C1	DB44418
STAN312i-906C3	DB44421
STAN360i-465C2	DB44240
STAN088i-060C1	DB35739
STAN164i-352C1	DB35976
STAN165i-352C5	DB35979
STAN230i-533C1	DB35783
STAN231i-533C2	DB35786

(see remainder in comments)

UNIQUE IDENTIFIER: NA

TEST RESULTS:

# Tested	# Positives (Growth)	- Control
30	1	2 Negatives

Native Product Sterility Report



TEST SUMMARY:

# Samples	Media Type	Volume (mL)	Incubation Temperature (° C)	Incubation Duration (Days)
30	TSB	40	20-25	14
30	FTG	40	30-35	14

REFERENCE:

Processed according to LAB-003: Sterility Test Procedure

PD #:

000053

TEST METHODOLOGY:

USP - Direct Transfer

COMMENTS:

Sample # 20030283

Sample labeled ISMMS 827i C2P16 AP 030416 in Media Type TSB is positive.

Sample Name/Description continued:

SCRPO302i DB42682
SCRPO104i DB42002
SCRPO202i DB42005
SCRPO203i DB42677
SCRPO307i DB42014

REVIEWED BY

A handwritten signature in blue ink, appearing to be "m. l. h.", written over a horizontal line.

DATE

20 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

04Mar20

FORM SOP-CH-048.01

Version B Edition 01

Sample Name	Result	Comments/Suggestions
MCW099i-40000558-WB67411 (80709)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MCW072i-40001708-WB67413 (80710)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MCW102i-UR117-WB67432 (80716)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MCW108i-U2165-WB67431 (80717)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
Elf1-WB67433 (80718)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MCW062i-U2157-WB67410 (80719)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
INC123 02Mar20KR (80720)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
INC149 02Mar20AP (80721)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
Positive (+) Control	Positive	
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.