



Thaw and Culture Details

Cell Line Name	MCW101i-40001005
WiCell Lot Number	WB67209
Parent Material	MCW101i-40001005-DB66409
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 Vialied	28-May-2019
Vial Label	MCW101i-40001005 p17 WB67209
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>Results: 46,X,der(X;1)(p10;q10),+1[5]/46,XX[15] Interpretation: This is an abnormal karyotype. Five of twenty cells examined contain an unbalanced rearrangement of chromosome X in which an extra copy of the long (q) arm of chromosome 1 was translocated to the long (q) arm of chromosome X. The derivative chromosome X results in loss of the entire Xq 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^{EX})

Approval Date	Quality Assurance Approval
04-June-2020	<p data-bbox="1019 590 1057 604">6/4/2020</p> <p data-bbox="878 617 927 642">X JKG</p> <p data-bbox="878 646 964 680">JKG Quality Assurance Signed by: Gay, Jenna</p>

Date Reported: Monday, November 25, 2019

Cell Line Sex: Female

Cell Line: MCW101i-40001005-WB67209
15159

Reason for Testing: Lot release testing

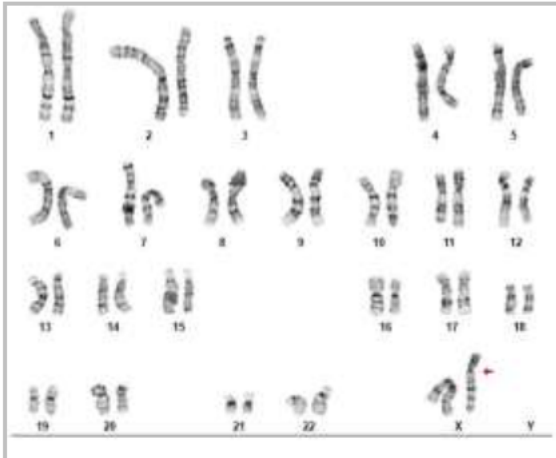
Passage#: 17

Date of Sample: 11/20/2019

Investigator: [REDACTED], WiCell

Specimen: Human IPSC

Results: 46,X,der(X;1)(p10;q10),+1[5]/46,XX[15]



Cell: 26

Slide: G01

Slide Type: Karyotype

Total Counted: 20

Total Analyzed: 8

Total Karyogrammed: 5

Band Resolution: 375 - 425

Interpretation:

This is an abnormal karyotype. Five of twenty cells examined contain an unbalanced rearrangement of chromosome X in which an extra copy of the long (q) arm of chromosome 1 was translocated to the long (q) arm of chromosome X. The derivative chromosome X results in loss of the entire Xq 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]art, 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.



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:

15159-STR

Sample Name on Tube: 15159-STR

106.9 ng/μL, (A260/280=1.91)

Sample Type: Cells

Cell Count: ~2 million cells

Requestor:

WiCell Research Institute

Quality Assurance Department

Receive Date: 12/05/19

Report Sent: 12/16/19

Assay Date: 12/10/19

File Name: STR 191212 wmr

Report Date: 12/16/19

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 15159-STR cells submitted by WiCell QA dated and received on 12/05/19, this sample (Label on Tube: 15159-STR) defines the STR profile of the human cell line MCW101i-40001005 comprising 25 allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: No STR polymorphisms other than those corresponding to the human MCW101i-40001005 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 15159-STR sample submitted corresponds to the MCW101i-40001005 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 12/16/19

X *WMR*

Digitally Signed on 12/16/19

██████████, 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

Native Product Sterility Report



COMMENTS: NA

REVIEWED BY 

DATE 28 JUN 19

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

25Nov19

FORM SOP-CH-048.01

Version A Edition 01

Sample Name	Result	Comments/Suggestions
MCW110i-U2170-WB67204 15153 (79186)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MCW107i-40000886-WB67227 15154 (79187)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MCW101i-40001005-WB67209 15159 (79188)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
WC060i-226-1-2-22-WB67334 15142 (79189)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
Positive (+) Control	Positive	
Negative (-) Control	Negative	

Reported by: [REDACTED], Cell Culture Specialist

Reviewed by: [REDACTED] Cell Culture Specialist

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A gel image is available upon request.