



Thaw and Culture Details

Cell Line Name	MCW039i-4000473
WiCell Lot Number	WB67386
Parent Material	MCW039i-4000473-DB66344
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	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 Viald	13-January-2020
Vial Label	MCW039i-4000473 p16 WB67386
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
25-February-2020	<p style="text-align: right; margin-right: 50px;"><small>2/25/2020</small></p> <p>X JKG JKG Quality Assurance Signed by: Gay, Jenna</p>

Date Reported: Friday, February 14, 2020

Cell Line: MCW039i-40000473-WB67386

Passage#: 16

Date of Sample: 2/6/2020

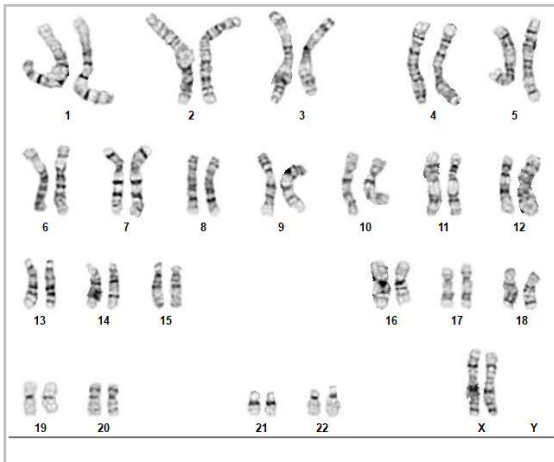
Specimen: Human iPSC

Results: 46,XX

Cell Line Sex: Female

Reason for Testing: LOT_RELEASE

Investigator: [REDACTED], WiCell



Cell: 33

Slide: G03

Slide Type: Karyotype

Total Counted: 20

Total Analyzed: 8

Total Karyogrammed: 4

Band Resolution: 400 - 425

Interpretation:

This is a normal karyotype; no clonal abnormalities were detected at the stated band level of resolution.

Completed by: [REDACTED]

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



characterization@wicell.org
(608) 316-4145

Sample Report:

MCW039i-40000473-WB67386 p.16 D01 (80266)

Sample Name on Tube: MCW039i-40000473-WB67386 p.16 D01 (80266)
41.7 ng/ μ L, (A260/280=1.41)

Sample Type: DNA

Cell Count: N/A

Requestor:

WiCell Research Institute

Characterization Department

Receive Date: 02/11/20

Report Sent: 02/14/20

Assay Date: 02/11/20

File Name: STR 200212 wmr

Report Date: 02/17/20

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 MCW039i-40000473-WB67386 p.16 D01 (80266) DNA submitted by WiCell Characterization Department dated and received on 02/10/20, this sample (Label on Tube: MCW039i-40000473-WB67386 p.16 D01 (80266)) defines the STR profile of the human cell line MCW039i-40000473 comprising 25 allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: No STR polymorphisms other than those corresponding to the human MCW039i-40000473 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 MCW039i-40000473-WB67386 p.16 D01 (80266) sample submitted corresponds to the MCW039i-40000473 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 02/17/20

██████████, BA
TRIP Laboratory, Molecular

X *WMR*

Digitally Signed on 02/17/20

██████████, PhD, Director / Co-Director
UWHC Molecular Diagnostics Laboratory / UWSPH 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 #: 20011487
DATE RECEIVED: 23-Jan-20
TEST INITIATED: 29-Jan-20
TEST COMPLETED: 12-Feb-20

SAMPLE NAME / DESCRIPTION: WC067i-310-17-2-33 WB67384 15235
WC068i-310-17-2-36 WB67382 15236
WC072i-226-1-2-39 WB67383 15237
MCW039i-40000473 WB67386 15238
MCW042i-40001401 WB67385 15239
MCW035i-A3267 WB67388 15240
WC064i-247-1-2-22 WB67389 15241
PENNO22i-89-1 DB36532 15245
UCSD128i-7-5 WB67390 15243
PENNO21i-749-4 DB36149 15244
UNIQUE IDENTIFIER: NA

TEST RESULTS:

# Tested	# Positives (Growth)	- Control
10	0	2 Negatives

TEST SUMMARY:

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

REFERENCE: Processed according to LAB-003: Sterility Test Procedure
PD #: 000053
TEST METHODOLOGY: USP - Direct Transfer

COMMENTS: NA

REVIEWED BY

DATE 14 FEB 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

10Feb20

FORM SOP-CH-048.01

Version A Edition 01

Sample Name	Result	Comments/Suggestions
MCW084i-U2053-DB66392 p14 (80216)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MCW087i-U7112-DB66395 p16 (80217)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MCW098i-40002583-DB66406 p14 (80219)	Inconclusive	
UCSD125i-7-2-WB59219 p19 (80220)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MCW039i-40000473-WB67386 p16 (80221)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MCW018i-A2868-WB67397 p16 (80245)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
Positive (+) Control	Positive	
Negative (-) Control	Negative	

Reported by: Hannah Rueth, Assistant Research Specialist

Reviewed by: Amber Kuhn, Assistant Research Specialist

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A gel image is available upon request.