Thaw and Culture Details

Cell Line Name	**MCW115i-U2143**
WiCell Lot Number	**WB67428**
Parent Material	MCW115i-U2143-DB66423
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	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 Vialed	15-February-2020
Vial Label	MCW115i-U2143 p16 WB67428
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.

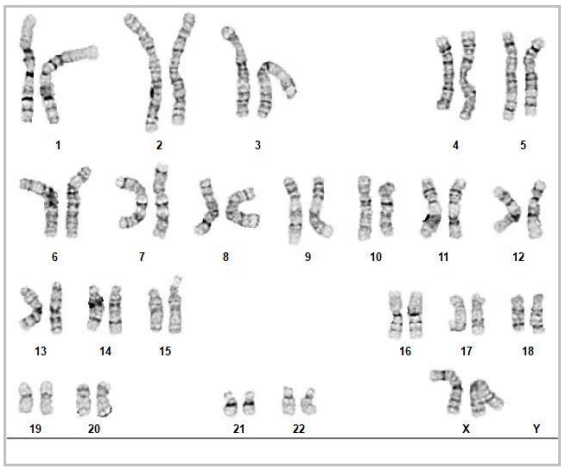
- Tra1-60 marker expression
- mRNA expression by qPCR
- Infinium® Expanded Multi-Ethnic Genotyping Array (MEGA^{EX})

Approval Date	Quality Assurance Approval
09-April-2020	4/9/2020 X JKG JKG Quality Assurance Signed by: Gay, Jenna

Chromosome Analysis Report: 080616

Date Reported: Thursday, February 27, 2020
Cell Line: MCW115i-U2143-WB67428
Passage#: 16
Date of Sample: 2/25/2020
Specimen: Human IPSC
Results: 46,XX

Cell Line Sex: Female
Reason for Testing: LOT_RELEASE
Investigator: WiCell Stem Cell Bank, WiCell



Cell: 2
Slide: G01
Slide Type: Karyotype

Total Counted: 20
Total Analyzed: 8
Total Karyogrammed: 4
Band Resolution: 425 - 475

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".

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:
MCW115i-U2143-WB67428 p.16 D01 (80616)
Sample Name on Tube: MCW115i-U2143-WB67428 p.16 D01 (80616)
6.2 ng/µL, (A260/280=1.32)
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 200311 wmr
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 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 MCW115i-U2143-WB67428 p.16 D01 (80616) cells submitted by WiCell Characterization Department dated and received on 03/02/20, this sample (Label on Tube: MCW115i-U2143-WB67428 p.16 D01 (80616)) defines the STR profile of the human cell line MCW115i-U2143 comprising 27 allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: No STR polymorphisms other than those corresponding to the human MCW115i-U2143 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 MCW115i-U2143-WB67428 p.16 D01 (80616) sample submitted corresponds to the MCW115i-U2143 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**

[redacted], *BA*
TRIP Laboratory, Molecular

X *WMR* **Digitally Signed on 03/14/20**

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

Native Product Sterility Report

STERIS

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
SCRP5402i	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

STERIS

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:

SCRP0302i	DB42682
SCRP0104i	DB42002
SCRP0202i	DB42005
SCRP0203i	DB42677
SCRP0307i	DB42014

REVIEWED BY _____ DATE 20 MAR 2020

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.
SCRP5402i-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: Alex Paguirigan, Assistant Cell Culture Specialist
Reviewed by: Katie Remondini, Cell Culture Specialist

A gel image is available upon request.