



Thaw and Culture Details

Cell Line Name	MCW033i-A7195
WiCell Lot Number	WB67156
Parent Material	MCW033i-A7195-DB66338
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	p18 These cells were cultured for 17 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 18.
Date Vialied	08-April-2019
Vial Label	MCW033i-A7195 p18 WB67156
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,XY,i(20)(q10)[4]/46,XY[16] Interpretation: This is an abnormal karyotype. There is an isochromosome of the long (q) arm of chromosome 20 in four of twenty cells examined. This imbalance results in trisomy for 20q and monosomy for 20p. Gain of chromosome 20q 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

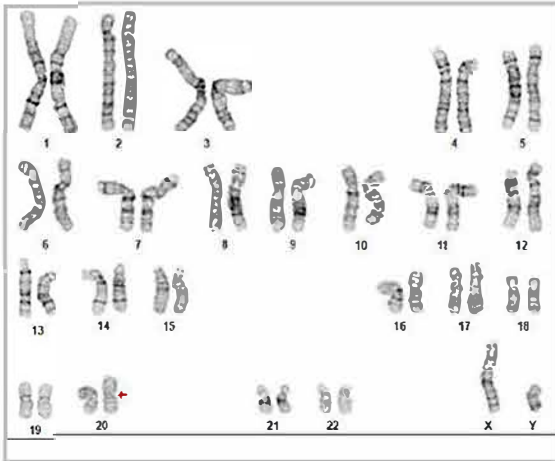
The Provider stated that some or all of the additional analyses listed below may have been performed for this cell line. For more information, publication and dbGaP links, where available, are provided on the cell line specific web page on the WiCell website.

- 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="878 617 932 642">X JKG</p> <p data-bbox="878 642 964 678">JKG Quality Assurance Signed by: Gay, Jenna</p>

Date Reported: Monday, May 06, 2019
Cell Line: MCW033i-A7195-WB67156 14568
Passage#: 18
Date of Sample: 4/26/2019
Specimen: Human IPS
Results: 46, XY,i(20)(q10)[4]/46, XY[16]

Cell Line Sex: Male
Reason for Testing: lot release testing
Investigator: [REDACTED], WiCell



Cell: 8
Slide: G01
Slide Type: Karyotype
Total Counted: 20
Total Analyzed: 8
Total Karyogrammed: 5
Band Resolution: 375 - 475

Interpretation:

This is an abnormal karyotype. There is an isochromosome of the long (q) arm of chromosome 20 in four of twenty cells examined. This imbalance results in trisomy for 20q and monosomy for 20p. Gain of chromosome 20q 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], 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:

14568-STR

Sample Name on Tube: 14568-STR

207.1 ng/μL, (A260/280=1.94)

Sample Type: Cells

Cell Count: ~2 million cells

Requestor:

WiCell Research Institute

Quality Assurance Department

Receive Date: 05/13/19

Report Sent: 05/21/19

Assay Date: 05/14/19

File Name: STR 190515 wmr

Report Date: 05/20/19

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 14568-STR cells submitted by WiCell QA dated and received on 05/13/19, this sample (Label on Tube: 14568-STR) defines the STR profile of the human cell line MCW033i-A7195 comprising 25 allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: No STR polymorphisms other than those corresponding to the human MCW033i-A7195 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 14568-STR sample submitted corresponds to the MCW033i-A7195 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 05/21/19

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

X *WMR*

Digitally Signed on 05/21/19

██████████, 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 #: 19050849
DATE RECEIVED: 09-May-19
TEST INITIATED: 15-May-19
TEST COMPLETED: 29-May-19

SAMPLE NAME / DESCRIPTION:

MCW057i-A3286	WB67153	14647
B2M-/Etrimer Elf1	WB67154	14648
MCW033i-A7195	WB67156	14649
MCW061i-40000329	WB67157	14650
MCW059i-40001067	WB67158	14651
MCW070i-40002330	WB67159	14652
B2M-/ Elf1	WB67160	14653
JHU210i	WB67162	14654
MCW052i-40001760	WB67163	14655
B2M-/Edimer Elf1	WB67155	14656
MCW063i-40000190	WB67164	14657
MCW065i-40001296	WB67165	14658
B2M-/Edimer(preCre)Elf1	WB67166	14659
MCW069i-40000268	WB67167	14660
MCW093i-40000435	WB67168	14661
PACS1003i-GM27161	DB67161	14662
STAN011i-123-1	DB31129	14663
STAN012i-123-2	DB31135	14664
STAN015i-178-1	DB31094	14665
STAN016i-178-2	DB31107	14666

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



Mycoplasma Assay Report

PCR-based assay performed by WiCell

Lot Release Testing

26Apr19

FORM SOP-CH-044.03

Version B Edition 01

#	Sample Name	Result	Comments/Suggestions
1	MCW033i-A7195-WB67156 14568	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
2	Positive (+) Control		
3	Negative (-) Control		

Reported by: [REDACTED], Research Specialist-Cytogenetics

Reviewed by: [REDACTED], Cell Culture Specialist

Date: _____ Sent By: _____ Sent To: _____

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A gel image is available upon request.