



Thaw and Culture Details

Cell Line Name	MCW080i-U2236
WiCell Lot Number	WB67188
Parent Material	MCW080i-U2236-DB66374
Provider	Medical College of Wisconsin – Laboratory of Dr. Ulrich Broeckel
Banked By	WiCell
Thaw and Culture Recommendations	WiCell recommends thawing 1 vial into 2 well of a 6 wells 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	08-May-2019
Vial Label	MCW080i-U2236 p16 WB67188
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,add(5)(p15.3)[19] Nonclonal findings: 47,XY,add(5)(p15.3),+8,t(8;8)(p23.3;q11.1) Interpretation: This is an abnormal karyotype. Twenty of twenty cells examined contain an unbalanced structural aberration in the short (p) arm of chromosome 5. This abnormality, in which additional material of unknown origin translocated to chromosome 5p, cannot be characterized by G-banded chromosome analysis. Additional testing, e.g., chromosomal microarray or spectral karyotyping (SKY), may be helpful in characterization of this specimen. No other clonal abnormalities were detected at the stated band level of resolution.</p> <p>There is a nonclonal finding, listed above, which contains a chromosomal aberration (gain of chromosome 8) recurrently acquired in pluripotent stem cell cultures. Nonclonal findings may result from technical artifact, but may be due to a developing clonal abnormality or to low-level mosaicism.</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	<div style="text-align: right; font-size: small;">6/4/2020</div>  <div style="font-size: x-small; text-align: center;"> X JKG JKG Quality Assurance Signed by: Gay, Jenna </div>

Date Reported: Wednesday, November 6, 2019

Cell Line Sex: Male

Cell Line: MCW080i-U2236-WB67188 15093

Reason for Testing: Lot Release Testing

Passage#: 16

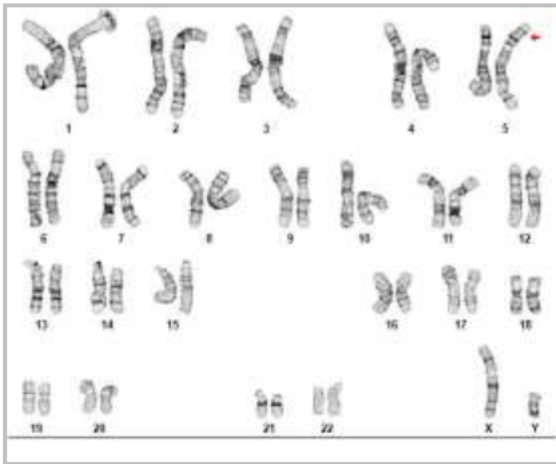
Date of Sample: 11/1/2019

Investigator: [REDACTED], WiCell

Specimen: Human IPSC

Results: 46,XY,add(5)(p15.3)[19]

Nonclonal findings: 47,XY,add(5)(p15.3),+8,t(8;8)(p23.3;q11.1)



Cell: 23

Slide: G03

Slide Type: Karyotype

Total Counted: 20

Total Analyzed: 9

Total Karyogrammed: 5

Band Resolution: 500 - 550

Interpretation:

This is an abnormal karyotype. Twenty of twenty cells examined contain an unbalanced structural aberration in the short (p) arm of chromosome 5. This abnormality, in which additional material of unknown origin translocated to chromosome 5p, cannot be characterized by G-banded chromosome analysis. Additional testing, e.g., chromosomal microarray or spectral karyotyping (SKY), may be helpful in characterization of this specimen. No other clonal abnormalities were detected at the stated band level of resolution.

There is a nonclonal finding, listed above, which contains a chromosomal aberration (gain of chromosome 8) recurrently acquired in pluripotent stem cell cultures. Nonclonal findings may result from technical artifact, but may be due to a developing clonal abnormality or to low-level mosaicism.

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:

15093-STR

Sample Name on Tube: 15093-STR

53.4 ng/ μ L, (A260/280=1.77)

Sample Type: Cells

Cell Count: ~2 million cells

Requestor:

WiCell Research Institute

Quality Assurance Department

Receive Date: 11/11/19

Report Sent: 11/19/19

Assay Date: 11/13/19

File Name: STR 191113 wmr

Report Date: 11/19/19

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 15093-STR cells submitted by WiCell QA dated and received on 11/11/19, this sample (Label on Tube: 15093-STR) defines the STR profile of the human cell line MCW080i-U2236 comprising 27 allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: No STR polymorphisms other than those corresponding to the human MCW080i-U2236 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 15093-STR sample submitted corresponds to the MCW080i-U2236 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 11/19/19

X *WMR*

Digitally Signed on 11/19/19

██████████, 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 #: 19052193
DATE RECEIVED: 23-May-19
TEST INITIATED: 03-Jun-19
TEST COMPLETED: 17-Jun-19

SAMPLE NAME / DESCRIPTION:			
STAN011i-123-1	DB31129	14728	
STAN012i-123-2	DB31135	14729	
MCW066i-U2368	WB67169	14730	
MCW049i-40001630	WB67173	14731	
MCW083i-40000695	WB67174	14732	
MCW092i-U2390	WB67175	14733	
MCW094i-U7120	WB67177	14734	
MCW095i-U2311	WB67185	14735	
MCW088i-40000442	WB67186	14736	
MCW089i-40000312	WB67187	14737	
MCW080i-U2236	WB67188	14738	
CBiPS-6.2	DB66959	14739	
CBiPS-19.11	DB66960	14740	
CBiPS-6.13	DB66961	14741	
CBiPS-E12C1	DB66962	14742	
CBiPS-E17C6	DB66963	14743	
CBiPS-LZ6-1	DB66976	14744	
CBiPS-LZ6-2	DB66977	14745	
CBiPS-LZ6-12	DB66978	14746	
Sendai-9-1	DB66967	14747	
CBiPS-LZ6+3	DB66979	14748	
029 iPS clone 4	DB66975	14749	
retro-20.1	DB66966	14750	
NiPSC	DB66965	14751	
SCR2101i	DB42034	14752	
SCR2115i	DB42040	14753	
SCR2208i	DB42043	14754*	
UNIQUE IDENTIFIER:	NA		

Native Product Sterility Report



TEST RESULTS:

# Tested	# Positives (Growth)	- Control
30	0	2 Negatives

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 #19052193

"Reported as" per packing slip

*SCR2210i DB42046 14755
SCR2305i DB42054 14756
WC044i-IVF15-36 WB67190 14757

REVIEWED BY

DATE

20 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

04Nov19

FORM SOP-CH-048.01

Version A Edition 01

Sample Name	Result	Comments/Suggestions
WIZ04e-H9CAGmChry-WB67287 15092 (78907)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
SCR4505i-WB67291 15087 (78912)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MCW080i-U2236-WB67188 15093 (78913)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MCW081i-U7128-WB67194 15091 (78914)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MCW069i-40000268-WB67167 15088 (78915)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
STAN204i-448C1-WB67189 15089 (78916)	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.