Thaw and Culture Details

Cell Line Name	**MCW028i-A7312**
WiCell Lot Number	**WB67058**
Parent Material	MCW028i-A7312-DB66333
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: mTeSR™1
	Matrix: Matrigel®
Protocol	WiCell Feeder Independent mTeSR™1 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 what the overall passage number of the cells at thaw. Plated cells at thaw should be labeled passage 16.
Date Vialed	12-March-2019
Vial Label	MCW028i-A7312 p16 WB67058
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, ≤ 30% Differentiation and recoverable attachment after passage	Pass
Identity by STR	UW Translational Research Initiatives in Pathology Laboratory	PowerPlex 16 HS System by Promega	Defines profile	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.

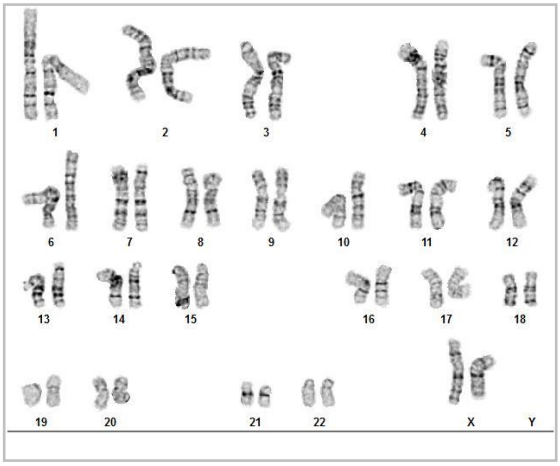
- Tra1-60 marker expression
- mRNA expression by qPCR
- Infinium® Expanded Multi-Ethnic Genotyping Array (MEGA^{EX})

Approval Date	Quality Assurance Approval
23-May-2019	5/23/2019 X JKG JKG Quality Assurance Signed by: Gay, Jenna

Chromosome Analysis Report: 075763

Date Reported: Tuesday, April 02, 2019
Cell Line: MCW028i-A7312-WB67058 14441
Passage#: 16
Date of Sample: 3/22/2019
Specimen: Human IPS
Results: 46,XX

Cell Line Sex: Female
Reason for Testing: lot release testing
Investigator: [redacted], WiCell



Cell: 28
Slide: G02
Slide Type: Karyotype

Total Counted: 20
Total Analyzed: 8
Total Karyogrammed: 4
Band Resolution: 375 - 425

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/
(608) 265-9168

WiCell
Your Lab Partner
characterization@wicell.org
(608) 316-4145

Sample Report:
14441-STR
Sample Name on Tube: 14441-STR
73.4 ng/µL, (A260/280=1.92)
Sample Type: Cells
Cell Count: ~2 million cells

Requestor:
WiCell Research Institute
Quality Assurance Department

Receive Date: 03/25/19
Report Sent: 04/01/19
Assay Date: 03/28/19
File Name: STR 190329 wmr
Report Date: 03/29/19

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 14441-STR cells submitted by WiCell QA dated and received on 03/25/19, this sample (Label on Tube: 14441-STR) defines the STR profile of the human stem cell line MCW028i-A7312 comprising 29 allelic polymorphisms across the 15 STR loci analyzed.**

Interpretation: **No STR polymorphisms other than those corresponding to the human MCW028i-A7312 stem 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 14441-STR sample submitted corresponds to the MCW028i-A7312 stem 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 stem cell lines is ~2-5%.**

X *RMB* **Digitally Signed on 04/01/19**

[redacted] *BA*
TRIP Laboratory, Molecular

X *WMR* **Digitally Signed on 04/01/19**

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

Native Product Sterility Report

STERIS

SAMPLE #:	19041939
DATE RECEIVED:	25-Apr-19
TEST INITIATED:	30-Apr-19
TEST COMPLETED:	14-May-19

WiCell
504 S Rosa Road, Rm 101
Madison, WI 53719

SAMPLE NAME / DESCRIPTION:

STAN364i-005C2	DB44301	14586
MCW028i-A7312	WB67058	14587
MCW040i-40001098	WB67059	14588
MCW078i-40000978	WB67060	14589
JHU006i-1	WB67147	14590
MCW056i-U7076	WB67150	14591
WC045i-IVF15-38	WB67149	14592
WC046i-IVF15-39	WB67148	14593
MCW044i-U2448	WB67152	14594
STAN349i-762C3	WB67151	14595

UNIQUE IDENTIFIER: NA

TEST RESULTS:

# Tested	# Positives (Growth)	- Control
10	2	3 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: TSB sample labeled STAN364i-005C2/DB44301/14586 and FTG sample labeled MCW040i-40001098/WB67059/14588 are positive.

REVIEWED BY _____ DATE 17MAY19

Mycoplasma Assay Report

PCR-based assay performed by WiCell

Lot Release Testing

25Mar19

FORM SOP-CH-044.03
Version B Edition 01

#	Sample Name	Result	Comments/Suggestions
1	MCW028i-A7312-WB67058 14441	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
2	Positive (+) Control	Positive	
3	Negative (-) Control	Negative	

Reported by: Katie Remondini, Cell Culture Specialist
Reviewed by: Sondra Minter, Cell Culture Specialist
Date:_____ Sent By:____ Sent To_____

A gel image is available upon request.