

### **Thaw and Culture Details**

Cell Line Name	MCW050i-40000626					
WiCell Lot Number	WB66467					
Provider	Medical College of Wisconsin – Laboratory of Dr. Ulrich Broeckel					
Banked By	ViCell					
Thaw and Culture Recommendations	WiCell recommends thawing 1 vial into 3 wells of a 6 well plate.					
Culture Platform	Feeder Independent					
	Medium: TeSR <sup>™</sup> -E8 <sup>™</sup>					
	Matrix: Matrigel®					
Protocol	WiCell Feeder Independent E8 Medium Protocol					
Passage Number p13 These cells were cultured for 12 passages prior to freeze and post colony picking. WiCell at the passage number at freeze to best represent what the overall passage number of the cell Plated cells at thaw should be labeled passage 13.						
Date Vialed	29-July-2017					
Vial Label	MCW050i-40000626 p13 WB66467					
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,					
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-QU-004	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<sup>®</sup> Expanded Multi-Ethnic Genotyping Array (MEGA<sup>EX</sup>)

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The material provided under this certificate has been subjected to the tests specified and the results and data described herein are accurate based on WiCell's reasonable knowledge and belief. Appropriate Biosafety Level practices and universal precautions should always be used with this material. For clarity, the foregoing is governed solely by WiCell's Terms and Conditions of Service, which can be found at http://www.wicell.org/privacyandterms.



Approval Date	Quality Assurance Approval
14-May-2018	9/27/2018 XG Quality Assurance Signed by Gay, Jenna

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Date Reported: Tuesday, September 11, 2018 Cell Line Sex: Female Cell Line: MCW050i-40000626-WB66467 Reason for Testing: lot release testing 13777 Passage#: 13 Date of Sample: 8/31/2018 Investigator: WiCell Specimen: Human IPS Results: 46,XX **Cell: 82** Slide: G03 Slide Type: Karyotype Total Counted: 20 Total Analyzed: 8 Total Karyogrammed: 4 Band Resolution: 475 - 500 38 88 66

#### Interpretation:

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

Completed by: Reviewed and Interpreted by:		CG(ASCP) 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) http://www.pathology.wisc.edu/research/trip

Sample Report: 13777-STR Sample Name on Tube: 13777-STR 58.2 ng/µL, (A260/280=2.26) Sample Type: Cells Cell Count: ~2 million cells **Requestor:** WiCell Research Institute Quality Department WiCell<sup>®</sup> info@wicell.org (888) 204-1782

Sample Date: N/A Receive Date: 09/10/18 Assay Date: 09/17/18 File Name: STR 190918 repeat Report Date: 09/19/18

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					
ТРОХ	6-13	information has					
D8S1179	7-18	<ul> <li>been redacted to</li> <li>protect donor</li> </ul>					
vWA							
Amelogenin							
Penta D	2.2, 3.2, 5, 7-17	more information is required,					
CSF1PO	6-15	please, contact					
D16S539	5, 8-15	WiCell's Technical					
D7S820	6-14	Support.					
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						
<b>TH01</b>	4-9,9.3,10-11,13.3						
D3S1358	12-20						

<u>Results:</u> Based on the 13777-STR cells submitted by WiCell QA dated and received on 09/10/18, this sample (Label on Tube: 13777-STR) defines the STR profile of the human stem cell line MCW050i-40000626 comprising 27 allelic polymorphisms across the 15 STR loci analyzed.

<u>Interpretation:</u> No STR polymorphisms other than those corresponding to the human MCW050i-40000626 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 13777-STR sample submitted corresponds to the MCW050i-40000626 stem cell line and was not contaminated with any other human stem cells or a significant amount of mouse feeder layer cells.

<u>Sensitivity</u>: 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 09/20/18	X WMR Digitally Sign	ned on 09/20/18
BA TRIP Laboratory, Molecular		r / Co-Director pratory / 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: http://www.pathology.wisc.edu/research/trip/acknowledging TRIP agrees to maintain the confidentiality of any information provided to it in connection with its performance of this STR analysis on the same conditions as set forth in paragraph 2 of WiCell's Terms and Conditions of Service (http://www.wicell.org/media.acux/1a429b84-2b54-44a4-8ad8-5c05db93dd8a).



## Native Product Sterility Report



		SAMPLE #:	18030537
WiCell		DATE RECEIVED:	08-Mar-18
504 S Rosa Rd, Rm 101		TEST INITIATED:	13-Mar-18
·	T	EST COMPLETED:	
Madison, WI 53719	IE	ST COMPLETED:	27-Mar-18
SAMPLE NAME / DESCRIPTION:	STAN129i-212C2 DB35772 13516		
	STAN130i-212C4 DB35777 13517		
	MCW002i-40001265 WB66495 13518		
	MCW004i-40002545 WB66488 13519		
	MCW006i-40000930 WB66499 13520		
	MCW008i-40000992 WB66496 13521		
	MCW010i-40000756 WB66487 13522		
	MCW011i-40000664 WB66486 13523		
	MCW015i-A2196 WB66497 13524		
	MCW016i-A2159 WB66510 13525		
	MCW021i-50001743 WB66448 13526		
	MCW025i-A2566 WB66504 13527		
	MCW034i-A2780 WB66502 13528		
	MCW036i-A3170 WB66501 13529		
	MCW037i-50000777 WB66459 13530		
	MCW041i-U2104 WB66494 13531		
	MCW048i-40001845 WB66460 13532		
	MCW050i-40000626 WB66467 13533		
	MCW067i-40001036 WB66478 13534		
	MCW068i-40002385 WB66452 13535		
UNIQUE IDENTIFIER:	NA	3	
PRODUCT REGISTRATION:	Other: Human iPS cells		
TEST BESULTS	# Positives	-	

TEST RESULTS:	# Tested	# Positives (Growth)	- Control	
	20	0	2 Negatives	

**TEST SUMMARY:** 

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

REFERENCE:

METHOD VALIDATION / PD #:

Processed according to LAB-003: Sterility Test Procedure 000053

# Native Product Sterility Report



TEST METHODOLOGY:

USP - Direct Transfer

COMMENTS: Sample #18030537

Report as per packing slip.

Dersand REVIEWED BY

DATE 28MAR18

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.



### Mycoplasma Detection Assay Report Testing Performed by WiCell

Testing Performed by WiCell Lot Release Testing August 29, 2018 FORM SOP-QU-004.01 Version G Edition 02 Reported by: AP Reviewed by: SM BD Monolight 180

		Reading A A		Read	ling B	В	Ratio			
#	Sample Name	RLU1	RLU2	Ave	RLU1	RLU2	Ave	B/A	Result	<b>Comments/Suggestions</b>
1	MCW050i-40000626-WB66467 13777	303	320	311.5	113	124	118.5	0.38	Negative	
2	Positive (+) Control	358	377	367.5	60649	60575	60612	164.93	Positive	
3	Negative (-) Control	800	810	805	98	99	98.5	0.12	Negative	

