



## Thaw and Culture Details

Cell Line Name	MCW009i-40002262
WiCell Lot Number	WB67029
Parent Material	MCW009i-40002262-DB66314
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	p15 These cells were cultured for 14 passages prior to freeze and post colony picking. 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 15.
Date Vialied	05-March-2019
Vial Label	MCW009i-40002262 p15 WB67029
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><b>Results:</b> 46,XX Nonclonal findings: 47,XX,+8  <b>Interpretation:</b> This is a normal karyotype; no clonal abnormalities were detected at the stated band level of resolution. There is a nonclonal finding, listed above, which contains a chromosomal aberration (trisomy 8) recurrently acquired in cultures of this cell type. An additional twenty cells were examined for this chromosomal aberration; it was not observed. 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, ≤ 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<sup>EX</sup>)

Approval Date	Quality Assurance Approval
15-April-2019	<p style="text-align: right;">4/15/2019</p> <p>X JKG _____ JKG Quality Assurance Signed by: Gay, Jenna</p>

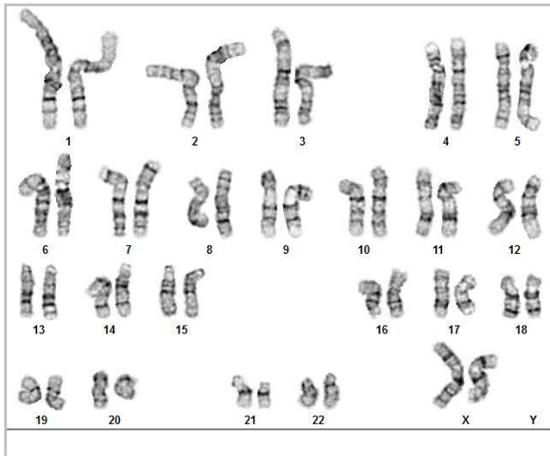
**Date Reported:** Tuesday, April 02, 2019  
**Cell Line:** MCW009i-40002262-WB67029  
14445

**Cell Line Sex:** Female  
**Reason for Testing:** lot release testing

**Passage#:** 15  
**Date of Sample:** 3/22/2019  
**Specimen:** Human IPS  
**Results:** 46,XX

**Investigator:** [REDACTED], WiCell

**Nonclonal findings:** 47,XX,+8



**Cell:** 72  
**Slide:** G03  
**Slide Type:** Karyotype

**Total Counted:** 40  
**Total Analyzed:** 8  
**Total Karyogrammed:** 4  
**Band Resolution:** 475 - 500

### Interpretation:

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

**There is a nonclonal finding, listed above, which contains a chromosomal aberration (trisomy 8) recurrently acquired in cultures of this cell type. An additional twenty cells were examined for this chromosomal aberration; it was not observed. 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](http://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.*

# Short Tandem Repeat Analysis

Department of Pathology and Laboratory Medicine  
TRIP Laboratory (Molecular)  
<https://research.pathology.wisc.edu/trip/>  
(608) 265-9168

[characterization@wicell.org](mailto:characterization@wicell.org)  
(608) 316-4145

**Sample Report:**  
14445-STR  
**Sample Name on Tube:** 14445-STR  
79.5 ng/ $\mu$ L, (A260/280=1.94)  
**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 <a href="#">WiCell's Technical Support</a> .
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 14445-STR cells submitted by WiCell QA dated and received on 03/25/19, this sample (Label on Tube: 14445-STR) defines the STR profile of the human stem cell line MCW009i-40002262 comprising 25 allelic polymorphisms across the 15 STR loci analyzed.

**Interpretation:** No STR polymorphisms other than those corresponding to the human MCW009i-40002262 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 14445-STR sample submitted corresponds to the MCW009i-40002262 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

X *WMR*

Digitally Signed on 04/01/19

██████████, 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: <http://www.pathology.wisc.edu/research/trip/acknowledging>  
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 <https://www.wicell.org/media.acux/ca76d97c-862a-43f3-b02a-ab2d1e619100>. 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.

# Native Product Sterility Report



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

SAMPLE #: 19031144  
DATE RECEIVED: 14-Mar-19  
TEST INITIATED: 19-Mar-19  
TEST COMPLETED: 02-Apr-19

SAMPLE NAME / DESCRIPTION:	JHU198i	DB 36792	14404
	JHU228i	DB37019	14405
	CREM026i-SS38-1	WB67023	14406
	STAN068i-168-2	WB67016	14407
	MCW009i-40002262	WB67029	14408
	MCW001i-40001487	WB67030	14409
	LUEL7673i-3	WB67028	14410
	MIN 14i-33363.C	WB67034	14411
	STAN349i-762C3	WB67047	14412
	WA07	WB67045	14413

UNIQUE IDENTIFIER: NA

## TEST RESULTS:

# Tested	# Positives (Growth)	- Control
10	0	2 Negatives

## TEST SUMMARY:

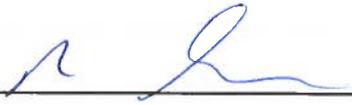
# Samples	Media Type	Volume (mL)	Incubation Temperature (° C)	Incubation Duration (Days)
10	TSB	40	20-25	14
10	FTG	40	30-35	14

REFERENCE: Processed according to LAB-003: Sterility Test Procedure

PD #: 000053

TEST METHODOLOGY: USP - Direct Transfer

COMMENTS: Reported as per packing slip.

REVIEWED BY 

DATE 02 APR 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

Lot Release Testing

25Mar19

FORM SOP-CH-044.03

Version B Edition 01

#	Sample Name	Result	Comments/Suggestions
1	MCW009i-40002262-WB67029 14445	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:** \_\_\_\_\_

*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](http://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.*

*A gel image is available upon request.*