

Thaw and Culture Details

Cell Line Name	MCW043i-U2326				
WiCell Lot Number	WB67056				
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. WiCe to the passage number at freeze to best represent what the overall passage number of the thaw. Plated cells at thaw should be labeled passage 18.					
Date Vialed 14-March-2019					
Vial Label MCW043i-U2326 p18 WB67056					
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	Sterility Steris		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})

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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		
	5/23/2019		
12-May-2018	Х лкд		
- ,	JKG Quality Assurance Signed by: Gay, Jenna		

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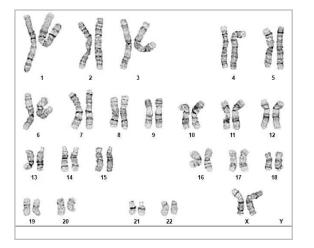
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Date Reported: Monday, May 06, 2019 Cell Line: MCW043i-U2326-WB67056 14569 Passage#: 18 Date of Sample: 4/26/2019 Specimen: Human IPS Results: 46,XX Cell Line Sex: Female Reason for Testing: lot release testing

Investigator:

, WiCell



Cell: 22
Slide: G02
Slide Type: Karyotype
Total Counted: 20
Total Analyzed: 8
Total Karyogrammed: 4
Band Resolution: 500 - 575

Interpretation:

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

 Completed by:
 Image: 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 or effect.

TRIPath

HISTOLOGY - IHC - MOLECULAR - IMAGING

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

Sample Report:

14569-STR Sample Name on Tube: 14569-STR 160.5 ng/μL, (A260/280=1.94) Sample Type: Cells Cell Count: ~2 million cells

Short Tandem Repeat Analysis

WiCell Research Institute

Quality Assurance Department

Requestor:



characterization@wicell.org (608) 316-4145

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
TPOX	6-13	been redacted to
D8S1179	7-18	protect donor
vWA	10-22	confidentiality. If
Amelogenin	X,Y	more information
Penta_D	2.2, 3.2, 5, 7-17	is required,
CSF1PO	6-15	please, contact <u>WiCell's Technical</u>
D16S539	5, 8-15	Support.
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	

<u>Results:</u> Based on the 14569-STR cells submitted by WiCell QA dated and received on 05/13/19, this sample (Label on Tube: 14569-STR) defines the STR profile of the human cell line MCW043i-U2326 comprising 25 allelic polymorphisms across the 15 STR loci analyzed.

<u>Interpretation:</u> No STR polymorphisms other than those corresponding to the human MCW043i-U2326 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 14569-STR sample submitted corresponds to the MCW043i-U2326 cell line and was not contaminated with any other human 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 cell lines is ~2-5%.

X RMB	Digitally Signed on 05/21/19	X WM	/R Digitally Signed on 05/21/19	
TRIP La	, BA boratory, Molecular	UWHC I	, PhD, Director / Co-Director Molecular Diagnostics Laboratory / UWSMPH TRIP Lab	boratory

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/ 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



				SAMPLE #:	19032457	
WiCell			DA	TE RECEIVED:	28-Mar-19	
504 S Rosa Road, Rm 10)1		т	EST INITIATED:	01-Apr-19	
Madison, WI 53719			TES	COMPLETED:	15-Apr-19	
SAMPLE NAME / DES	SCRIPTION:	WA07 WB67046 14	469			
		MCW012i-A7156 WB67051 14470				
		MCW014i-5000039	5 WB67052 14471			
		MCW032i-A7214 WB67053 14472				
		MCW053i-U2213 WB67054 14473				
		MCW043i-U2326 WB67056 14474				
		MCW045i-U2033 W	/B67057 14475			
		WC042e-H1dCGG0-	B7 WB67063 14476			
		WC043e-H13dCGG				
		WC044i-IVF15-36 W	/B67062 14478			
UNIQUE IDENTIFIER	1:	NA				
TEST RESULTS:		# Positives				
	# Tested	(Growth)	- Control			
	10	1	2 Negatives			

TEST SUMMARY:	# Samples	Media Type	Volume (mL)	Incubation Temperature (° C)	Incubation Duration (Days)	
	10	TSB	40	20-25	14	
	10	TSB	40	30-35	14	
REFERENCE:		Processed accord	ling to LAB-003: St	erility Test Procedu	ıre	
PD #:		000053				
TEST METHODOLOG	àΥ:	USP - Direct Transfer				

COMMENTS:

Sample labeled as WC044i-IVF15-36 WB67062 14478 was positive

REVIEWED BY

DATE 16 APRIL

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.

STERIS Laboratories 9303 West Broadway Ave Brooklyn Park, MN 55445



Mycoplasma Assay Report

PCR-based assay performed by WiCell Lot Release Testing 26Apr19

#	Sample Name	Result	Comments/Suggestions
1	MCW043i-U2326-WB67056 14569	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
2	Positive (+) Control		
3	Negative (-) Control		

Reported by: Brenna Anderson, Research Specialist-Cytogenetics

Reviewed by: Katie Remondini, Cell Culture Specialist

Date:

_____ Sent By:____ Sent To_____

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A gel image is available upon request.