

Thaw and Culture Details

Cell Line Name	WA09		
WiCell Lot Number	WB67614		
Parent Material	WA09-WB0090		
Provider	University of Wisconsin – Laboratory of Dr. James Thomson		
Banked By	WiCell		
Thaw and Culture Recommendations	WiCell recommends thawing 1 vial into 3 wells of a 6 well plate using mTeSR™Plus and Matrigel®.		
Protocol	WiCell Feeder Independent Pluripotent Stem Cell Protocol		
Culture Platform Prior to Freeze	Feeder Independent		
	Medium: mTeSR™Plus		
	Matrix: Matrigel®		
Passage Number	p26 These cells were cultured for 25 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 26.		
Date Vialed	12-January-2021		
Vial Label	WA09 p26 WB67614		
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-49	Expected karyotype	See Report
Post-Thaw Viable Cell Recovery	WiCell	SOP-99	≥ 15 Undifferentiated Colonies prior to passage, ≤ 30% Differentiation prior to passage, and recoverable attachment after passage	Pass
Identity by STR	WiCell	PowerPlex 16 HS System by Promega	Consistent with STR profile of deposited cell line	Pass
Sterility	Steris	ST/07	Negative	Pass
Mycoplasma	WiCell	SOP-79	Negative	Pass

Approval Date	Quality Assurance Approval		
10-February-2021	Z/11/2021 X JKG NG Quality Assurance Signed by: Gay, Jenna		

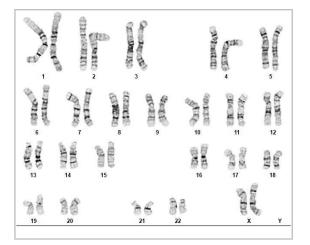


Chromosome Analysis Report: 084476

Date Reported: Monday, January 25, 2021

Cell Line: WA09-WB67614 Submitted Passage #: 26 Date of Sample: 1/19/2021 Specimen: Human ESC

Results: 46,XX



Cell Line Sex: Female

Reason for Testing: LOT_RELEASE

Investigator: WiCell Stem Cell Bank, WiCell

Cell: 49

Slide: G01

Slide Type: Karyotype

Total Counted: 20
Total Analyzed: 8

Total Karyogrammed: 4

Band Resolution: 425 - 450

QC Review By:

Interpretation:

Date:

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

Sent By:____ Sent To:

Completed by:	, CG(ASCP)
Reviewed and Interpreted by:	, PhD, FACMG

					•
imitations:	This assay allows for microscopic v	icualization of numerical and	d structural chromosome abnormalities.	The size of structural abnormality	that can be detected
_IIIIIIaliOIIS.	This assay allows for microscopic v	isualization of numerical and	i structural critorilosoffie abriorillanties.	THE SIZE OF STRUCTURAL ADDITION HAIRLY	inal can be delected
- 0 40145	d	attended to the form of the control of the control of	ina a na Fana da a na mara a a a a a da ina mana a a da a a a a a a a a a a a a a a a	!	

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.



Requestor: WiCell Stem Cell Bank, WiCell
Samples Received: 11Jan21, 14Jan21, 19Jan21, 21Jan21, 25Jan21, 26Jan21
STR Amplification Date: 25Jan21, 28Jan21

Sample Name	JHU053i- DB36209 p6	JHU157i- DB36352 p16	EMe-TPint5GCA5- DB67600 p40	EMe-TPint5GCC1- DB67601 p40	MIN28i-35833.A- WB67616 p14	MIN29i-35833.B- WB67612 p12	WA09-WB67614 p26
Label on tube	84425	84426	84447	84448	84468	84469	84476
FGA							26, 28
ТРОХ							10, 11
D8S1179							8, 14
vWA							17, 17
Amelogenin			المائد مادا	in a			X, X
Penta_D			ldentifyi informa	ing tion has			9, 13
CSF1PO			been re	dacted to			11, 11
D16S539			protect	donor ntiality. If			12, 13
D7S820			more in	formation			9, 11
D13S317	is required,						9, 9
D5S818	please contact info@wicell.org						11, 12
Penta_E							11, 14
D18S51							13, 13
D21S11							30, 30
TH01							9.3, 9.3
D3S1358							13, 16
Allelic Polymorphisms	27	26	24	24	25	25	24
Matches*							See Matches Comment
Comments							

^{*}Note: The STR profile of the following sample is an exact match for the given sample/samples.



Requestor: WiCell Stem Cell Bank, WiCell Samples Received: 11Jan21, 14Jan21, 19Jan21, 21Jan21, 25Jan21, 26Jan21

STR Amplification Date: 25Jan21, 28Jan21

		MIN30i-					
Sample Name	WA09-WB67615	33109.2G-	MIN27i-35326.K-	MIN26i-35326.I-	BWHi009-	MIN25i-35613.SF-	EMe-TPint5GC42-
	p26	WB67613 p35	WB67617 p10	WB67609 p26	WB66301 p180	1-WB67607 p17	DB67599 p39
Label on tube	84477	84496	84531	84534	84550	84551	84552
FGA							
TPOX							
D8S1179							
vWA							
Amelogenin							
Penta_D				Identifying			
CSF1PO				information has			
D16S539				been redacted to protect donor			
D7S820				confidentiality. If			
D13S317				more information is required,			
D5S818				please contact			
Penta_E				info@wicell.org			
D18S51							
D21S11							
TH01							
D3S1358							
Allelic Polymorphisms	24	26	29	34	28	26	24
Matches*	See Matches						
Whateries	Comment						
				¹ See Triploid			
Comments				Genotype			
				Comment			

^{*}Note: The STR profile of the following sample is an exact match for the given sample/samples.

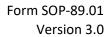


Requestor: WiCell Stem Cell Bank, WiCell Samples Received: 11Jan21, 14Jan21, 19Jan21, 21Jan21, 25Jan21, 26Jan21

STR Amplification Date: 25Jan21, 28Jan21

Sample Name	EMe-TPint5GC23- DB67598 p40
Label on tube	84553
FGA	
TPOX	
D8S1179	
vWA	
Amelogenin	Identifying
Penta_D	information has been redacted to
CSF1PO	protect donor
D16S539	confidentiality. If
D7S820	more information is required,
D13S317	please contact
D5S818	info@wicell.org
Penta_E	
D18S51	
D21S11	
TH01	
D3S1358	
Allelic Polymorphisms	24
Matches*	
Comments	

^{*}Note: The STR profile of the following sample is an exact match for the given sample/samples.





Requestor: WiCell Stem Cell Bank, WiCell
Samples Received: 11Jan21, 14Jan21, 19Jan21, 21Jan21, 25Jan21, 26Jan21
STR Amplification Date: 25Jan21, 28Jan21

Results: The genotypic profiles comprise a range of 24-34 allelic polymorphisms across the 15 STR loci analyzed.

<u>Interpretation:</u> 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. These results suggests that the cells submitted correspond to the cell lines as named and were 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%.

¹<u>Triploid Genotype:</u> A triploid genotype was detected at the vWA, Penta_D, D16S539, Penta_E, and D18S51 loci. This observation could be the result of chromosomal gain, loss, and/or amplification in this cell line.

Matches: Samples 84476 and 84477 are exact matches to each other and to 14630, 74319, 74844, 74924, 74925, 83593, 84032, 84034, and 84095.

	2/8/2021	2/8/2021	2/8/2021
X	X	X	
Tech #1 Characterization Signed by:	Tech #2 Characterization Signed by:	QA Review Quality Assurand Signed by:	re

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Raw data is available upon request.

Native Product Sterility Report



SAMPLE #:

21010718

DATE RECEIVED:

14-Jan-21

TEST INITIATED:

20-Jan-21

TEST COMPLETED:

03-Feb-21

SAMPLE NAME / DESCRIPTION:

504 S Rosa Road, Rm 101

Madison, WI 53719

BWHi009-WB66301

PENN038i-366-6-DB36313

JHU042i-DB41048 JHU133i-DB41335 JHU053i-DB36209 JHU157i-DB36352 JHU233i-DB37038 JHU214i-WB67611 WA09-WB67614 WA09-WB67615

UNIQUE IDENTIFIER:

N/A

TEST RESULTS:

WiCell

	# Positives	
# Tested	(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:

NA

REVIEWED BY

DAT

DATE 04 FEB 2021

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.

WiCell®

Mycoplasma Assay Report

PCR-based assay performed by WiCell WiCell 27Jan21

Sample Name	Result	Interpretation
WA09-WB67614 p26 (84476)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
WA09-WB67615 p26 (84477)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MIN30i-33109.2G-WB67613 p35 (84496)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MIN32i-33109.2B.3A12-DB67579 (84497)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MIN33i-33109.2G.1A4-DB67580 (84498)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MIN34i-33109.2G.2F2-DB67581 (84499)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
INC169 21Jan21MMM 1 of 2 (84500)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
INC169 21Jan21MMM 2 of 2 (84501)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
INC123 21Jan21KR 1 of 2 (84502)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
INC123 21Jan21KR 2 of 2 (84503)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MIN27i-35326.K-WB67617 p10 (84531)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MIN26i-35326.I-WB67609 p26 (84534)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MIN31i-33363.D.3C2-DB67578 p22 (84540)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
EMe-TPint5GC42-DB67599 p39 (84541)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
EMe-TPint5GC23-DB67598 p40 (84542)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
GCT27C4-DB67566 p6 (84543)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
GCT27DC1-DB67567 p8 (84544)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
Positive (+) Control	Positive	
Negative (-) Control	Negative	

Reported by: Assistant Cell Culture Specialist Reviewed by: Senior Cell Culture Specialist

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A gel image is available upon request.