

Thaw and Culture Details

Cell Line Name	WA09
WiCell Lot Number	WB67619
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 4 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	p29 These cells were cultured for 28 passages prior to freeze. 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 29.
Date Vialed	23-January-2021
Vial Label	WA09 p29 WB67619
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
11-March-2021	3/11/2021 XG Quality Assurance Signed by Gay, Jenna

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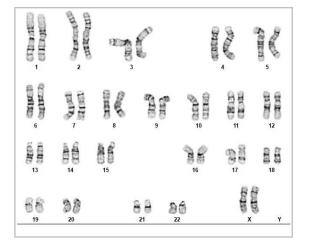
The material provided under this certificate has been subjected to the tests specified and the results and data described herein are accurate based on WiCell's reasonable knowledge and belief. Appropriate Biosafety Level practices and universal precautions should always be used with this material. For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



Chromosome Analysis Report: 084656

Date Reported: Tuesday, February 9, 2021 Cell Line: WA09-WB67619 Submitted Passage #: 29 Date of Sample: 2/2/2021 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: 400 - 450

Interpretation:

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

 Completed by:
 _________, CG(ASCP)

 Reviewed and Interpreted by:
 _____________, 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.



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Short Tandem Repeat

Requestor: WiCell Stem Cell Bank, WiCell Samples Received: 28Jan21, 02Feb21 STR Amplification Date: 03Feb21 Form SOP-89.01 Version 3.0

Sample Name	JHU214i- WB67611 p20	WA09-WB67619 p29
Label on tube	84614	84656
FGA		26, 28
ΤΡΟΧ		10, 11
D8S1179	Identifying	8, 14
vWA	information has been redacted to	17, 17
Amelogenin	protect donor	Х, Х
Penta_D	confidentiality. If	9, 13
CSF1PO	more information is required,	11, 11
D16S539	please contact	12, 13
D7\$820	info@wicell.org	9, 11
D13S317		9, 9
D5S818		11, 12
Penta_E		11, 14
D18S51		13, 13
D21S11		30, 30
TH01		9.3, 9.3
D3S1358		13, 16
Allelic Polymorphisms	28	24
Matches*		See Matches Comment
Comments		

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



Short Tandem Repeat

Requestor: WiCell Stem Cell Bank, WiCell Samples Received: 28Jan21, 02Feb21 STR Amplification Date: 03Feb21 Form SOP-89.01 Version 3.0

Results: The genotypic profiles comprise a range of 24-28 allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: 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%.

Matches: Sample 84656 is an exact match to 14630, 74319, 74844, 74924, 74925, 83593, 84032, 84034, 84095, 84476, and 84477.

2/8/2021

2/8/2021

2/8/2021



Tech #1 Characterization Signed by:

V	
X	

Tech #2
Characterization
Signed by:

×	
QA Review	

Quality Assurance Signed by:

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Raw data is available upon request.

Native Product Sterility Report



WiCell 504 S Rosa Road, Rm 101 Madison, Wl 53719		SAMPLE #: DATE RECEIVED: TEST INITIATED: TEST COMPLETED:	21020702 11-Feb-21 12-Feb-21 26-Feb-21
SAMPLE NAME / DESCRIPTION:	MIN28i-35833.A-WB67616 MIN31i-33363.D.3C2-WB67625 MIN29i-35833.B-WB67612 MIN30i-33109.2G-WB67613 MIN27i-35326.K-WB67617 JHU042i-WB67618 MIN33i-33109.2G.1A4-WB67621 WA09-WB67619 MIN32i-33109.2B.3A12-WB67622 MIN34i-33109.2G.2F2-WB67623		

UNIQUE IDENTIFIER:

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

N/A

TEST SUMMARY:	# Samples	Media Type	Volume (mL)	Incubation Temperature (° C)	Incubation Duration (Days)
	10	TSB	40	20-25	14
	10	FTG	40	30-35	44
		5			

REFERENCE: PD #: TEST METHODOLOGY:

Processed according to LAB-003: Sterility Test Procedure 000053 ISO - Direct Transfer

COMMENTS: NA

REVIEWED BY

DATE <u>DIMARTOZI</u>

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 WiCell 09Feb21

Sample Name	Result	Interpretation
WA09-WB67619 (84656)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MIN32i-33109.2B.3A12-WB67622 (84689)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MIN34i-33109.2G.2F2-WB67623 (84691)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MIN33i-33109.2G.1A4-WB67621 (84712)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
Positive (+) Control	Positive	
Negative (-) Control	Negative	

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

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A gel image is available upon request.