

Thaw and Culture Details

Cell Line Name	WIZ03e-H9CAGhM3Dq					
WiCell Lot Number	WB67299					
Provider	University of Wisconsin – Dr. Su-Chun Zhang					
Banked By	WiCell					
Thaw and Culture WiCell recommends thawing 1 vial into 3 wells of a 6 well plate. Recommendations						
Culture Platform	Feeder Independent					
	Medium: mTeSR™1					
	Matrix: Matrigel®					
Protocol	WiCell Feeder Independent mTeSR™1 Protocol					
Passage Number	p41 These cells were cultured for 40 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 41.					
Date Vialed	03-September-2019					
Vial Label	WIZ03e-H9CAGhM3Dq p41 WB67299					
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 prior to passage, ≤ 30% Differentiation prior to passage, and recoverable attachment after passage	Pass
Identity by STR	UW Translational Research Initiatives in Pathology Laboratory	PowerPlex 16 HS System by Promega	Defines STR profile of deposited cell line	Pass
Sterility	Steris	ST/07	Negative	Pass
Mycoplasma	WiCell	SOP-CH-044 or SOP-QU-004	Negative	Pass
Expression of Reporter Proteins	WiCell	n/a	Expression of reporter proteins reported in pluripotent state	Pass



Approval Date	Quality Assurance Approval
21-November-2019	11/21/2019 X JKG JKG Quality Assurance Signed by Gay, Jenna



Chromosome Analysis Report: 078227

Date Reported: Monday, September 16, 2019 Cell Line Sex: Female

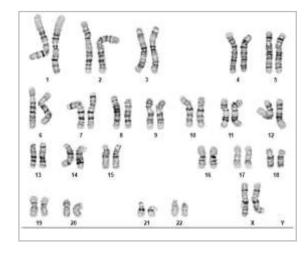
Cell Line: WIZ03e-H9CAGhM3Dq-WB67299 Reason for Testing: lot release testing

15000

Passage#: 41

Date of Sample: 9/10/2019 Specimen: Human ESC

Results: 46,XX



, WiCell

Cell: 14

Investigator:

Slide: G03

Slide Type: Karyotype

Total Counted: 20
Total Analyzed: 8

Total Karyogrammed: 4
Band Resolution: 450 - 525

Interpretation:	Inter	preta	tion:
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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.		 	 	 3	em	ъу.	•	 3	em	 <i>U.</i>	 	 	 	_	Qί	, RE	vie	W E	у. _—	 -	
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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.



Short Tandem Repeat Analysis HISTOLOGY - IHC - MOLECULAR - IMAGING



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

characterization@wicell.org (608) 316-4145

Sample Report: 15000-STR

Sample Name on Tube: 15000-STR

 $28.9 \text{ ng/}\mu\text{L}, (A260/280=1.61)$

Sample Type: Cells

Cell Count: ~2 million cells

Requestor: WiCell Research Institute Quality Assurance Department **Receive Date:** 10/07/19 **Report Sent:** 10/14/19 **Assav Date:** 10/08/19

File Name: STR 191009 wmr

Report Date: 10/14/19

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	26,28
TPOX	6-13	10,11
D8S1179	7-18	8,14
vWA	10-22	17,17
Amelogenin	X,Y	X,X
Penta_D	2.2, 3.2, 5, 7-17	9,13
CSF1PO	6-15	11,11
D16S539	5, 8-15	12,13
D7S820	6-14	9,11
D13S317	7-15	9,9
D5S818	7-16	11,12
Penta_E	5-24	11,14
D18S51	8-10, 10.2, 11-13, 13.2, 14-27	13,13
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	30,30
TH01	4-9,9.3,10-11,13.3	9.3,9.3
D3S1358	12-20	13,16

Results: Based on the 15000-STR cells submitted by WiCell QA dated and received on 10/07/19, this sample (Label on Tube: 15000-STR) defines the STR profile of the human cell line WIZ03e-H9CAGhM3Dq comprising 24 allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: No STR polymorphisms other than those corresponding to the human WIZ03e-H9CAGhM3Dq 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 15000-STR sample submitted corresponds to the WIZ03e-H9CAGhM3Dq-cell line and was 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 $\sim 2-5\%$.

X RMB	Digitally Signed on	10/14/19	X WMR	Digitally Signed on	10/14/19
TRIP La	, BA boratory, Molecular		UWHC Mole	 hD, Director / Co-Direct nostics Laboratory / UW.	tor ISMPH TRIP Laboratory

Native Product Sterility Report



SAMPLE #:

15040

15052

19100279

WiCell

DATE RECEIVED:

03-Oct-19

504 S Rosa Road, Rm 101

TEST INITIATED:

08-Oct-19

Madison, WI 53719

TEST COMPLETED:

22-Oct-19

SAMPLE NAME / DESCRIPTION:

SCRP5402i	
WIZ03e-H9CAGhM3Dq	
SCRP4403i	
SCRP4602i	
SCRP6301i	
CCDDC401:	

WB67299 15043 DB42092 15044 15045

S DB42098 S DB42993 15046 SCRP6401i DB42996 15047 WC054i-333-1-2-06 WB67308 15051 WC055i-333-1-2-09 WB67309

WC056i-333-1-2-12 WB67310 15053 WC052i-FX08-24 WB67321 15056

WB67303

UNIQUE IDENTIFIER:

NA

TEST RESULTS:

# Tested	# Positives (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	FTG	40	30-35	14

REFERENCE:

Processed according to LAB-003: Sterility Test Procedure

PD #:

000053

TEST METHODOLOGY:

USP - Direct Transfer

COMMENTS:

Sample labeled as SCRP5402i WB67303 15040 was positive.

REVIEWED BY DATE 280 (T 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.

WiCell®

Mycoplasma Assay Report

PCR-based assay performed by WiCell WiCell

Sample Name	Result	Comments/Suggestions
WIZ03e-H9CAGhM3Dq-WB67299 15000 (78265)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
INC149 11SEP19AP (78266)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MCW021i-50001743-WB67214 14964 (78267)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
WC050i-17097-02-01-WB67288 15003 (78268)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MCW065i-40001296-WB67165 14963 (78269)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MCW066i-U2368-WB67169 14962 (78270)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
INC123 11SEP19KR (78271)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
WC054i-333-1-2-06-DB67304 15023 (78296)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
WC056i-333-1-2-12-DB67306 15025 (78297)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
WC055i-333-1-2-09-DB67305 15024 (78298)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
Positive (+) Control	Positive	
Negative (-) Control	Negative	

Reported by: Molly Miles, Cell Culture Specialist Reviewed by: Katie Remondini, Cell Culture Specialist

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A gel image is available upon request.

Verification of mCherry Reporter Protein

Cell Line-Lot Number	WIZ03e-H9CAGhM3Dq-WB67299
Sample ID	15074
Passage Number	41
Assay Date	07Oct19
Reported By/Date	MMM/JB 10Oct19
Reviewed By/Date	JB 10Oct19
QA Review & Processed By/Date	HEB 17Oct19
Notes	⊠ N/A

Data Acquisition

Culture imaged by the University of Wisconsin Optical Imaging Core using a Leica DMi8
 Fluorescent Microscope (Filter sets for 4 color widefield fluorescence acquisition using a Hg Arc Lamp).

Results

• Does this lot express the mCherry reporter protein?

Yes X

