

Thaw and Culture Details

Cell Line Name	Elf1
WiCell Lot Number	WB67433
Parent Material	Elf1-WB17042
Provider	University of Washington – Laboratory of Dr. Carol Ware
Banked By	WiCell
Thaw and Culture Recommendations	WiCell recommends thawing 1 vial into 2 wells of a 6 well plate.
Culture Platform	Feeder Dependent
	Medium: Elf-1 cKOSR
	Matrix: MEF 3.5x10 ⁴ cells/cm2
Protocol	Feeder-Dependent Pluripotent Stem Cell Culture Protocols and Supplement Culture of Elf1 Cells
Passage Number	p14 These cells were cultured for 13 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 14.
Date Vialed	24-February-2020
Vial Label	Elf1 p14 WB67433
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	Consistent with STR profile of deposited cell line	Pass
Sterility	Steris	ST/07	Negative	Pass
Mycoplasma	WiCell	SOP-CH-044	Negative	Pass

Approval Date	Quality Assurance Approval
23-April-2020	4/23/2020
	X JKG
	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: 080822

Date Reported:Wednesday, March 18, 2020Cell Line Sex:FemaleCell Line:Elf1-WB67433Reason for Testing:LOT_RELEASEPassage#:15Investigator:WiCell Stem Cell Bank, WiCellDate of Sample:3/10/2020Investigator:WiCell Stem Cell Bank, WiCellSpecimen:Human ESCResults:46,XX

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13	14	15		16	17	18
2.0				A 6	1 and	No.
7 S 19	20		6 G 21	22	49 X	H Y

Cell: 101 Slide: G01 Slide Type: Karyotype Total Counted: 20 Total Analyzed: 8 Total Karyogrammed: 4 Band Resolution: 375 - 400

Interpretation:

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

Date:	Sent By:	Sent To:	QC Review By:
Reviewed and Interpreted by:		, Ph.D.	
Completed by:		, CG(ASCP)	

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.



Department of Pathology and Laboratory Medicine TRIP Laboratory (Molecular)

Your Lab Partner characterization@wicell.org (608) 316-4145

https://research.pathology.wisc.edu/trip-home/ (608) 265-9168

Short Tandem Repeat Analysis

Receive Date: 03/23/20 Report Sent: 04/21/20

Requestor: WiCell Characterization

Label on tube	MCW087i-U7112- WB67434 p.21 (80872)	CREM049i-BR21-1- DB66767 p.16 (80873)	CREM050i-BR23-1- DB66768 p.15 (80874)	WISCe011-A-40-WB67443 p.9 (80875)	SCRP0203i-DB42677 p.11 (80886)	CREM058i-BR43-1- DB66777 p.10 (80895)	CREM054i-BR33-1- DB66773 p.7 (80898)
Label on Report							
conc (ng/µL)							
A260/280							
Assay Date File Name				I de a tife de a			
FGA				Identifying information has been redacted to			
ΤΡΟΧ				protect donor			
D8S1179				confidentiality. If			
vWA				more information is required,			
Amelogenin				please, contact			
Penta_D				WiCell's Technical			
CSF1PO				<u>Support.</u>			
D16S539							
D7S820							
D13S317							
D5S818							
Penta_E							
D18S51							
D21S11							
TH01							
D3S1358							
Allelic Polymorphisms							
Matches* Comments							



HISTOLOGY - IHC - MOLECULAR – IMAGING Department of Pathology and Laboratory Medicine

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Short Tandem Repeat Analysis

Label on tube	Elf1-WB67433 p.16 (80899)	CREM024i-SS36-1- WB67440 p.12 (80952)	SCRP0302i-DB42682 p.14 (80953)	STAN312i-906C3-DB44421 p.16 (81039)
Label on Report	Elf1-WB67433 p.16 (80899)			
conc (ng/µL)	26.3			
A260/280	1.77			
Assay Date	4/16/2020		Identifying	
File Name	STR 200417 wmr		information has	
FGA	24,24		been redacted to	
ТРОХ	8,9		protect donor confidentiality. If	
D8S1179	13,14		more information	
vWA	17,18		is required,	
Amelogenin	Х,Х		please, contact WiCell's Technical	
Penta_D	13,14		Support.	
CSF1PO	10,11			
D16S539	11,11			
D7\$820	8,10			
D13\$317	11,13			
D5\$818	11,13			
Penta_E	5,12			
D18S51	15,18			
D21S11	29,31			
TH01	6,8			
D3S1358	16,16			
Allelic Polymorphisms	27			
Matches* Comments	16479			
comments				





Your Lab Partner characterization@wicell.org (608) 316-4145

Short Tandem Repeat Analysis

<u>Results</u>: Based on the DNA submitted by WiCell Characterization Department dated and received on 03/23/20, these samples define the STR profiles of the human cell lines as indicated by name. The genotypic profiles comprise a range of 26-30 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%.

¹ For sample 80874 a m loci.	icrovariant exists at the D3S1358 loci with	a size less than 11 bu	t undefined due to the lack of sizing standard prior to 11 at this
	Acknowledge TRIP in your public https://research.patl		
* Note: The STR proj	file of the following sample is an exact n	natch for the given :	sample/samples.
X RMB	Digitally Signed on 04/21/20	X WMR	Digitally Signed on 04/21/20
	, BA		PhD, Director / Co-Director
TRI	P Laboratory, Molecular	UWHC Mole	cular Diagnostics Laboratory / UWSMPH TRIP Laboratory
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Native Product Sterility Report



WiCell 504 S Rosa Road, Rm 101 Madison, WI 53719			SAMPLE # DATE RECEIVED TEST INITIATED TEST COMPLETED	: 05-Mar-20 : 06-Mar-20
SAMPLE NAME / DESCRIPTION:	MCW021i-5000174	3 WB67429		
	MCW084i-U2053	WB67427		
	MCW115i-U2143	WB67428		
	SCRP5402i	WB67430		
	MCW102i-UR117	WB67432		
	MCW108i-U2165	WB67431		
	CREM048i-BR3-1	DB66766		
	CREM049i-BR21-1	DB66767		
	CREM050i-BR23-1	DB66768		
	CREM061i-BT1-1	DB66780		
	CREM062i-BT2	DB66781		
	Elf1	WB67433		
	STAN133i-215C1	DB44608		
	STAN134i-215C2	DB44611		
	STAN291i-827C1	DB44304		
	STAN292i-827C2	DB44307		
	STAN251i-637C1	DB44371		
	STAN311i-906C1	DB44418		
	STAN312i-906C3	DB44421		
	STAN360i-465C2	DB44240		
	STAN088i-060C1	DB35739		
	STAN164i-352C1	DB35976		
	STAN165i-352C5	DB35979		
	STAN230i-533C1	DB35783		
	STAN231i-533C2	DB35786		
	(see remainder in c	omments)		
UNIQUE IDENTIFIER:	NA			

UNIQUE IDENTIFIER:

TEST RESULTS:

# Tested	# Positives (Growth)	- Control
30	1	2 Negatives

Native Product Sterility Report



TEST SUMMARY:	# Samples	Media Type	Volume (mL)	Incubation Temperature (° C)	Incubation Duration (Days)
	30	TSB	40	20-25	14
	30	FTG	40	30-35	14
REFERENCE:		Processed accord	ding to LAB-003: St	terility Test Procedu	Ire
PD #:		000053			
			,		
TEST METHODOLO	JGY:	USP - Direct Trar	nster		
COMMENTS:	Sample # 2003	0283			
	Sample labeled	1 ISMMS 827i C2P16	6 AP 030416 in Med	dia Type TSB is pos	sitive.
	Sample Name/ SCRP0302i	Description continue	d:		
	SCRP0104i	DB42002			
	SCRP0202i	DB42005			
	SCRP0203i	DB42677			
		DB42014	1		
	SCRP0307i	BBILOTT	li l		
	SCRP0307i		2 2 1	DATE	0.0-

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 04Mar20

Sample Name	Result	Comments/Suggestions
MCW099i-40000558-WB67411 (80709)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MCW072i-40001708-WB67413 (80710)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MCW102i-UR117-WB67432 (80716)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MCW108i-U2165-WB67431 (80717)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
Elf1-WB67433 (80718)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MCW062i-U2157-WB67410 (80719)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
INC123 02Mar20KR (80720)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
INC149 02Mar20AP (80721)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
Positive (+) Control	Positive	
Negative (-) Control	Negative	

Reported by: _____, Cell Culture Specialist Reviewed by: _____, Cell Culture Specialist

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A gel image is available upon request.