

Thaw and Culture Details

Cell Line Name	CREM054i-BR33-1
WiCell Lot Number	DB66773
Provider	Boston University – Laboratory of Dr. Martin Steinberg
Banked By	Boston University - Laboratory of Dr. Gustavo Mostoslavsky
Thaw and Culture Recommendations	WiCell recommends thawing 1 vial into 2 wells of a 6 well plate.
Culture Platform	Feeder Independent
	Medium: mTeSR™1
	Matrix: Matrigel®
Protocol	WiCell Feeder Independent mTeSR [™] 1 Protocol
Passage Number	p5 These cells were cultured for 5 passages prior to freeze and post colony picking. Therefore, plated cells at thaw should be labeled passage 6.
Date Vialed	01-December-2014
Vial Label	hiPSC BR-SP-33-1 p5/T 12-1-14 AS
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	Recoverable attachment after passage	Pass
Identity by STR	UW Translational Research Initiatives in Pathology Laboratory	PowerPlex 16 HS System by Promega	STR profile of deposited cell line	Pass
Sterility	Steris	ST/07	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.

- Digital Genome Sequencing
- Infinium[®] Expanded Multi-Ethnic Genotyping Array (MEGA^{EX})

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Approval Date	Quality Assurance Approval
25-June-2018	4/23,2820 XIG Quality Assurance Signed by: Gay, Jenna

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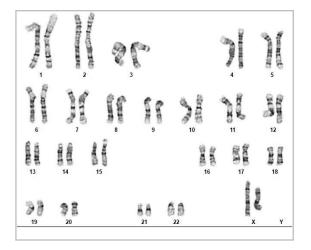
The material provided under this certificate has been subjected to the tests specified and the results and data described herein are accurate based on WiCell's reasonable knowledge and belief. Appropriate Biosafety Level practices and universal precautions should always be used with this material. For 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: 080898

Date Reported: Wednesday, March 18, 2020 Cell Line: CREM054i-BR33-1-DB66773 Passage#: 7 Date of Sample: 3/13/2020 Specimen: Human IPSC Results: 46,XX Cell Line Sex: Female Reason for Testing: LOT_RELEASE

Investigator: WiCell Stem Cell Bank, WiCell



Cell: 18 Slide: G01 Slide Type: Karyotype Total Counted: 20 Total Analyzed: 8 Total Karyogrammed: 4 Band Resolution: 425 - 500

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:
 ________, Ph.D.

 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.



Department of Pathology and Laboratory Medicine

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



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

Short Tandem Repeat Analysis

Receive Date: 03/23/20

Requestor: WiCell Characterization

Report Sent: 04/21/20

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				Identifying			
FGA				information has			
ТРОХ				been redacted to			
D8S1179				protect donor confidentiality. If			
vWA				more information			
Amelogenin				is required,			
Penta_D				please, contact WiCell's Technical			
CSF1PO				WiCell's Technical Support.			
D165539							
D7S820							
D13S317							
D5S818							
Penta_E							
D18551							
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 conc (ng/µL) A260/280 Assay Date File Name FGA TPOX D8S1179 vWA Amelogenin Penta_D CSF1PO D16S539 D7S820 D13S317 D5S818 Penta_E D18S51 D21S11 TH01 D3S1358		Identifyi informa been re protect confider more in is requil please,	ing tion has dacted to donor ntiality. If formation red, contact	
Allelic Polymorphisms Matches*				
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	undefined due to the lack of sizing standard prior to 11 at this
	Acknowledge TRIP in your public https://research.pati		
* 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
TRII	P Laboratory, Molecular	UWHC Mole	cular Diagnostics Laboratory / UWSMPH TRIP Laboratory
Unless otherwise mutually a	greed in writing, the services provided to you hereunder by cux/ca76d97c-862a-43f3-b02a-ab2d1e619100. Any terms y	/ WiCell Research Institute, In	as not yet been approved by the FDA and is for investigational use only. .: ("WiCell") are governed solely by WiCell's Terms and Conditions of Service, found at order or other document that are inconsistent, add to, or conflict with WiCell's Terms agal force or effect.

Native Product Sterility Report



		SAMPLE #:	18070439
WiCell		DATE RECEIVED:	10-Jul-18
504 S. Rosa Rd, Rm 101		TEST INITIATED:	12-Jul-18
Madison, WI 53719		TEST COMPLETED:	26-Jul-18
SAMPLE NAME / DESCRIPTION:	JHU224i WB66855 13853		
	PENN009i-57-52 WB66859 13854		
	CREM053i-BR31-1 DB66772 13855		
	CREM054i-BR33-1 DB66773 13856		
	CREM055i-BR37-1 DB66774 13857		
	CREM056i-BR39-1 DB66775 13858		
	CREM057i-BR41-1 DB66776 13859		
	CREM058i-BR43-1 DB66777 13860		
	CREM059i-BR45-1 DB66778 13861		
	CREM060i-BR51-1 DB66779 13862		
UNIQUE IDENTIFIER:	NA		
PRODUCT REGISTRATION:	Other: Human IPS cells		

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

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

REFERENCE: METHOD VALIDATION / PD #: TEST METHODOLOGY: Processed according to LAB-003: Sterility Test Procedure 000053 USP - Direct Transfer

COMMENTS:

"Reported as" per packing slip.

REVIEWED BY in

DATE 27 JULIS

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.



Mycoplasma Assay Report

PCR-based assay performed by WiCell WiCell 20Mar20

Sample Name	Result	Comments/Suggestions
WISCe011-A-40-WB67443 (80870)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
CREM024i-SS36-1-WB67440 (80954)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
CREM048i-BR3-1-DB66766 (81033)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
CREM049i-BR21-1-DB66767 (81034)	0	Band was not seen at 270bp, indicating the absence of mycoplasma.
CREM050i-BR23-1-DB66768 (81035)		Band was not seen at 270bp, indicating the absence of mycoplasma.
CREM054i-BR33-1-DB66773 (81036)	1 to Butt to	Band was not seen at 270bp, indicating the absence of mycoplasma.
CREM055i-BR37-1-DB66774 (81037)		Band was not seen at 270bp, indicating the absence of mycoplasma.
GFAP-R88C-DB67436 (81038)	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: Assistant Research Specialist

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A gel image is available upon request.