

Thaw and Culture Details

Cell Line Name	CREM017i-SS19-1						
WiCell Lot Number	DB48016						
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 1 well of a 6 well plate.						
	Feeder Dependent						
	Medium: hESC Medium (KOSR)						
	Matrix: MEF						
Protocol	WiCell Feeder Dependent Protocol						
Passage Number	p7 These cells were cultured for 7 passages after colony picking prior to freeze. Add +1 to the passage number to best represent the overall passage number of the cells at thaw.						
Date Vialed	21-July-2015						
Vial Label	SS19-1p7 hiPSC/KSR 7/21/15 SMP						
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 Provider Test Method		Result
Karyotype by G-banding	WiCell	SOP-CH-003	Expected karyotype	Pass
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	Defines profile	Pass
Sterility	Steris	ST/07 Negative		Pass
Mycoplasma	WiCell	SOP-QU-004	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 (MEGAEX)

Approval Date	Quality Assurance Approval		
05-December-2016	9/21/2017 KG 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.



Wednesday, September 13, Cell Line Gender: Male Date Reported: 2017 Cell Line: CREM017i-SS19-1-DB48016 12707 Reason for Testing: lot release testing Passage#: 10 Date of Sample: 9/1/2017 Investigator: Specimen: Human IPS Results: 46,XY **Cell: 22** Slide: G02 Slide Type: Karyotype 12 Total Counted: 20 Total Analyzed: 8 Total Karyogrammed: 5 Band Resolution: 425 - 500 A 进行

Interpretation:

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



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 may not be relied upon by any other party without the prior written consent of the Director of the WiCell Cytogenetics Laboratory. The results of this assay are for research use only. If the results of this assay are to be used for any other purpose, contact the Director of the WiCell Cytogenetics Laboratory.

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Short Tandem Repeat Analysis

Department of Pathology and Laboratory Medicine TRIP Laboratory (Molecular) http://www.pathology.wisc.edu/research/trip

Sample Report: 12707-STR Sample Name on Tube: 12707-STR 45.0 ng/µL, (A260/280=2.18) Sample Type: Cells Cell Count: ~2 million cells

Requestor: WiCell Research Institute **Ouality Department**

WiCell® info@wicell.org (888) 204-1782

Sample Date: N/A **Receive Date:** 09/05/17 Assav Date: 09/12/17 File Name: 170913 STR WMR **Report Date:** 09/15/17

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	Identifying information has			
TPOX	6-13	been redacted to			
D8S1179					
vWA					
Amelogenin	X,Y	more information			
Penta_D	2.2, 3.2, 5, 7-17	is required,			
CSF1PO	6-15	please, contact WiCell's Technical			
D16S539	5, 8-15	Support.			
D7S820	6-14				
D13S317	7-15				
D5S818	7-16				
Penta_E	5-24				
D18S51	8-10, 10.2, 11-13, 13.2, 14-27				
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				
TH01	4-9,9.3,10-11,13.3				
D3S1358	12-20				

Results: Based on the 12707-STR cells submitted by WiCell QA dated and received on 09/05/17, this sample (Label on Tube: 12707-STR) defines the STR profile of the human stem cell line CREM017i-SS19-1 comprising 28 allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: No STR polymorphisms other than those corresponding to the human CREM017i-SS19-1 stem 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 12707-STR sample submitted corresponds to the CREM017i-SS19-1 stem cell line and was not contaminated with any other human stem 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 stem cell lines is ~2-5%.

X RMB Digitally Signed on 09/15/17	X WMR Digitally Signed on 09/15/17
	, PhD, Director / Co-Director

TRIP Laboratory, Molecular

UWHC Molecular Diagnostics Laboratory / UWSMPH TRIP Laboratory

Testing was accomplished by analysis of human genetic polymorphisms at STR loci. This methodology has not yet been approved by the FDA and is for investigational use only. Acknowledge TRIP in your publications, posters & presentations. For details, see: http://www.pathology.wisc.edu/research/trip/acknowledging TRIP agrees to maintain the confidentiality of any information provided to it in connection with its performance of this STR analysis on the same conditions as set forth in paragraph 2 of WiCell's Terms and Conditions of Service (http://www.wicell.org/media.acux/1a429b84-2b54-44a4-8ad8-5c05db93dd8a).

Native Product Sterility Report



WiCell 504 S Rosa Rd, Rm 101 Madison, WI 53719		SAMPLE #: DATE RECEIVED: TEST INITIATED: TEST COMPLETED:	17041445 19-Apr-17 21-Apr-17 05-May-17
SAMPLE NAME / DESCRIPTION:	JFMD3 WB62418 12473 JFRBi2 WB62419 12474 JFMD1 WB62435 12475 WISCi004-A-1 WB62846 12476 WISCi004-A-2 WB62848 12477 WISCi004-A-3 WB62903 12478 WISCi004-A-3 WB62903 12479 UCSD017i-3-5 WB54903 12480 UCSD019i-3-7 WB62523 12481 UCSD069-19-3 WB55070 12482 CREM010i-SS9-1 DB47994 12463 CREM011i-SS12-1 DB51676 12464 CREM012i-SS13-1 DB48001 12465 CREM013i-SS14-1 DB48004 12466 CREM014i-SS15-1 DB48007 12467 CREM015i-SS16-1 DB48013 12469 CREM016i-SS18-1 DB48013 12469 CREM017i-SS19-1 DB48016 12470 CREM023i-SS35-1 DB48034 12471 UCSD015i-3-3 WB60296 12472		
UNIQUE IDENTIFIER:	NA		

PRODUCT REGISTRATION:

Human iPS cells

TEST RESULTS:		# Positives	
	# Tested	(Growth)	- Control
	20	0	3 Negatives

TEST SUMMARY:

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

REFERENCE:

METHOD VALIDATION / PD #:

Processed according to LAB-003: Sterility Test Procedure 000053





TEST METHODOLOGY:

USP - Direct Transfer

REVIEWED BY

at



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 Detection Assay Report Testing Performed by WiCell

Testing Performed by WiCell Lot Release Testing August 11, 2017 FORM SOP-QU-004.01 Version F Edition 02 Reported by: KR Reviewed by: DF 17AUG17 Berthold Flash n' Glo 539

		Read	ing A	Α	Read	ing B	В	Ratio		
#	Sample Name	RLU1	RLU2	Ave	RLU1	RLU2	Ave	B/A	Result	Comments/Suggestions
1	CREM017i-SS19-1-DB48016 12707	135	133	134	67	60	63.5	0.47	Negative	
2	Positive (+) Control	112	111	111.5	9801	9727	9764	87.57	Positive	
3	Negative (-) Control	232	233	232.5	29	28	28.5	0.12	Negative	

