Thaw and Culture Details

Cell Line Name	**CREM010i-SS9-1**
WiCell Lot Number	**DB47994**
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 Dependent
	Medium: hESC Medium (KOSR)
	Matrix: MEF
Protocol	WiCell Feeder Dependent Protocol
Passage Number	p6 These cells were cultured for 6 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	17-October-2015
Vial Label	SS9-1p6 hiPSC/KSR 10/17/15 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 Method	Test Specification	Result
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 STR profile of deposited cell line	Pass
Sterility	Biotest Laboratories	ST/07	Negative	Pass
Mycoplasma	WiCell	SOP-QU-004	Negative	Pass
Karyotype by G-banding	WiCell	SOP-CH-003	Report karyotype	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})

Approval Date	Quality Assurance Approval
05-December-2016	5/20/2020 X AA AA Quality Assurance Signed by: Arntz, Andy

Short Tandem Repeat Analysis

School of Medicine and Public Health
UNIVERSITY OF WISCONSIN-MADISON
Department of Pathology and Laboratory Medicine
TRIP Laboratory (Molecular)
http://www.pathology.wisc.edu/research/trip

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

Sample Report:
12488-STR
Sample Name on Tube: 12488-STR
51.4 ng/µL, (A260/280=1.71)
Sample Type: Cells
Cell Count: ~2 million cells

Requestor:
WiCell Research Institute
Quality Department

Sample Date: N/A
Receive Date: 05/08/17
Assay Date: 05/10/17
File Name: STR 170511 wmr
Report Date: 05/12/17

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 been redacted to protect donor confidentiality. If more information is required, please, contact WiCell's Technical Support.
TPOX	6-13	
D8S1179	7-18	
vWA	10-22	
Amelogenin	X,Y	
Penta_D	2.2, 3.2, 5, 7-17	
CSF1PO	6-15	
D16S539	5, 8-15	
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 12488-STR cells submitted by WiCell QA dated and received on 05/08/17, this sample (Label on Tube: 12488-STR) defines the STR profile of the human stem cell line CREM010i-SS9-1 comprising 28 allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: No STR polymorphisms other than those corresponding to the human CREM010i-SS9-1 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 12488-STR sample submitted corresponds to the CREM010i-SS9-1 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 05/15/17**

[redacted]
TRIP Laboratory, Molecular

X *WMR* **Digitally Signed on 05/15/17**

[redacted], *PhD, Director / Co-Director*
UWHC Molecular Diagnostics Laboratory / UWSMPH TRIP Laboratory

Native Product Sterility Report

STERIS

WiCell
504 S Rosa Rd, Rm 101
Madison, WI 53719

SAMPLE #: 17041445
DATE RECEIVED: 19-Apr-17
TEST INITIATED: 21-Apr-17
TEST COMPLETED: 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-4 WB62825 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 DB48010 12468
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:

# Tested	# Positives (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: Processed according to LAB-003: Sterility Test Procedure

METHOD VALIDATION / PD #: 000053

Native Product Sterility Report

STERIS

TEST METHODOLOGY: USP - Direct Transfer

REVIEWED BY _____ DATE 08MAY17

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

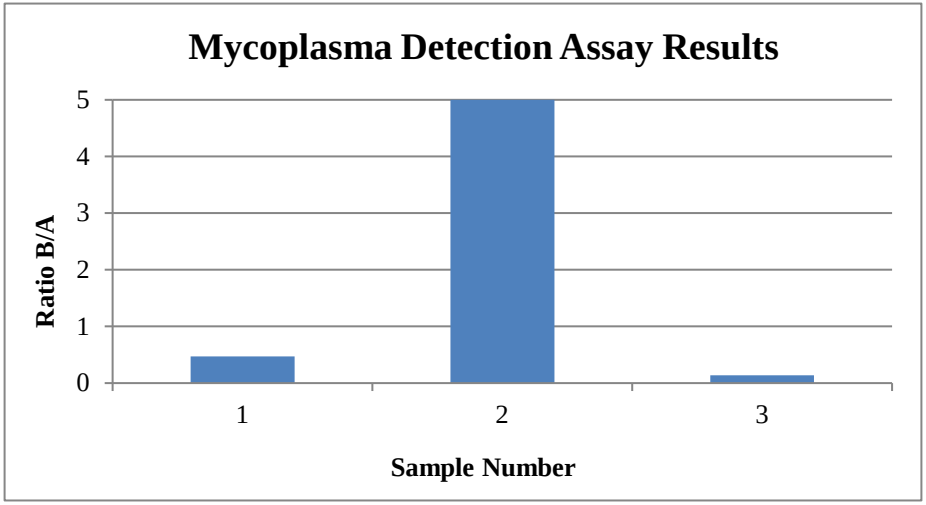
Testing Performed by WiCell

Lot Release Testing

April 21, 2017

FORM SOP-QU-004.01
Version F Edition 02
Reported by: KR
Reviewed by: JB
BD Monolight 180

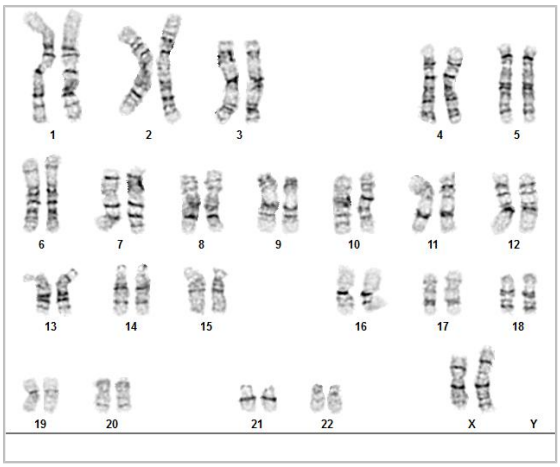
#	Sample Name	Reading A		A Ave	Reading B		B Ave	Ratio B/A	Result	Comments/Suggestions
		RLU1	RLU2		RLU1	RLU2				
1	CREM010i-SS9-1-DB47994 12488	370	377	373.5	176	175	175.5	0.47	Negative	
2	Positive (+) Control	485	495	490	31295	31440	31368	64.02	Positive	
3	Negative (-) Control	700	742	721	101	99	100	0.14	Negative	



Chromosome Analysis Report: 064711

Date Reported: Monday, May 15, 2017
Cell Line: CREM010i-SS9-1-DB47994 12488
Passage#: 8
Date of Sample: 5/3/2017
Specimen: iPSC
Results: 46,XX

Cell Line Gender: Female
Reason for Testing: Lot release testing
Investigator: [redacted], WiCell CDM



Cell: 5
Slide: 1
Slide Type: Karyotype

Total Counted: 20
Total Analyzed: 8
Total Karyogrammed: 4
Band Resolution: 450 - 550

Interpretation:

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

Completed by: [redacted] MS, CG(ASCP)
Reviewed and Interpreted by: [redacted], PhD, FACMG

A signed copy of this report is available upon request.

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 may not be relied upon by any other party without the prior written consent of the Director of the WiCell Cytogenetics Laboratory. The resu lts 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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