

Thaw and Culture Details

Cell Line Name	UCSD019i-3-7								
WiCell Lot Number	WB62523								
Provider	University of California, San Diego – Dr. Kelly Frazer								
Banked By	WiCell								
Thaw and Culture Recommendations	WiCell recommends thawing 1 vial into 3 wells of a 6 well plate.								
Culture Platform	Feeder Independent								
	Medium: mTeSR™1								
	Matrix: Matrigel®								
Protocol	WiCell Feeder Independent mTeSR™1 Protocol								
Passage Number p27 These cells were cultured for 26 passages prior to freeze and post reprogramming. WiCell at the passage number to best represent the overall passage number of the cells at thaw.									
Date Vialed	06-April-2017								
Vial Label	UCSD019i-3-7 p27 WB62523								
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

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Test Description	Test Provider	Test Method	Test Specification	Result					
Karyotype by G-banding	WiCell	SOP-CH-003	Expected karyotype	Pass					
Post-Thaw Viable Cell Recovery	WiCell	SOP-CH-305	≥ 15 Undifferentiated Colonies, ≤ 30% Differentiation and 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.

- Illumina® HumanCoreExome BeadChip Array
- RNA-Seq
- Flow Cytometry (SSEA-4, Tra 1-81)
- Infinium® Expanded Multi-Ethnic Genotyping Array (MEGAEX)



Approval Date	Quality Assurance Approval		
23-May-2017	1/17/2018 X JKG NG Quality Assurance Signed by Gay, Jenna		



Chromosome Analysis Report: 069864

Date Reported: Thursday, December 28,

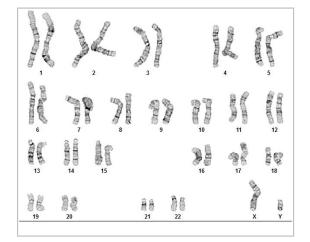
2017

Cell Line: UCSD019i-3-7-WB62523 13182

Passage#: 27

Date of Sample: 12/19/2017 Specimen: Human IPS

Results: 46,XY



Cell Line Gender: Male

Reason for Testing: lot release testing

Investigator: WiCell CDM

Cell: 67 Slide: G03

Slide Type: Karyotype

Total Counted: 20
Total Analyzed: 8

Total Karyogrammed: 4
Band Resolution: 475 - 575

QC Review By: ____

Interpretation:

Date:

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

Sent By:____ Sent To:____

cell populations in this specimen (i.e.,mosaicism) is limited by the number of metaphase cells examined, documented here as "# of cells counted".

Completed by: , CG(ASCP)
Reviewed and Interpreted by: PhD, FACMG

A signed copy of this report is available upon request.

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

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.

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)

http://www.pathology.wisc.edu/research/trip

info@wicell.org (888) 204-1782

Sample Report:

13182-STR

Sample Name on Tube: 13182-STR

82.4 ng/µL, (A260/280=1.92)

Sample Type: Cells

Cell Count: ~2 million cells

Requestor:

WiCell Research Institute

Quality Department

Sample Date: N/A **Receive Date:** 01/02/18 **Assay Date:** 01/04/18

File Name: STR 180105 wmr

Report Date: 01/10/18

STR Locus	STR Genotype Repeat #	STR Genotype						
FGA	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, 44.2,45.2, 46.2							
TPOX	6-13	information has been redacted to						
D8S1179	7-18	protect donor						
vWA	vWA 10-22 melogenin X,Y Penta_D 2.2, 3.2, 5, 7-17 CSF1PO 6-15 D16S539 5, 8-15 D7S820 6-14							
Amelogenin								
Penta_D								
CSF1PO								
D16S539								
D7S820								
D13S317	7-15							
D5S818	D5S818 7-16							
Penta_E								
D18S51	-							
D21S11								
TH01								
D3S1358	12-20							

Results: Based on the 13182-STR cells submitted by WiCell QA dated and received on 01/02/18, this sample (Label on Tube: 13182-STR) defines the STR profile of the human stem cell line UCSD019i-3-7 comprising 25 allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: No STR polymorphisms other than those corresponding to the human UCSD019i-3-7 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 13182-STR sample submitted corresponds to the UCSD019i-3-7 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 $\sim 2-5\%$.

X WMR \mathbf{X} RMB **Digitally Signed on** 01/11/18 **Digitally Signed on** 01/11/18 PhD, Director / Co-Director TRIP Laboratory, Molecular UWHC Molecular Diagnostics Laboratory / UWSMPH TRIP Laboratory

Native Product Sterility Report



WiCeli

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

STERIS Laboratories, Inc. 9303 West Broadway Ave Brooklyn Park, MN 55445

LAB-003 rev 29 Form 5 Effective: 2017-04-20 Page 1 of 2

Native Product Sterility Report



TEST METHODOLOGY:

USP - Direct Transfer

REVIEWED BY Sas	DATE 08MAYI7
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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 December 21, 2017

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

		Reading A A		Read	ling B	В	Ratio			
#	Sample Name	RLU1	RLU2	Ave	RLU1	RLU2	Ave	B/A	Result	Comments/Suggestions
1	UCSD019i-3-7-WB62523 13182	206	204	205	93	86	89.5	0.44	Negative	
2	Positive (+) Control	395	377	386	15569	15667	15618	40.46	Positive	
3	Negative (-) Control	594	614	604	67	66	66.5	0.11	Negative	

