

Thaw and Culture Details

Cell Line Name	UCSD017i-3-5							
WiCell Lot Number	WB54903							
Provider	University of California, San Diego – Dr. Kelly Frazer							
Banked By	WiCell							
Thaw and Culture Recommendations	WiCell recommends thawing 1 vial into 4 wells of a 6 well plate.							
Culture Platform	Feeder Independent							
	Medium: mTeSR™1							
	Matrix: Matrigel®							
Protocol	WiCell Feeder Independent mTeSR™1 Protocol							
Passage Number p24 These cells were cultured for 23 passages prior to freeze and post reprogramming. WiCell at to the passage number to best represent the overall passage number of the cells at thaw.								
Date Vialed	14-December-2016							
Vial Label	UCSD017i-3-5 p24 WB54903							
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

<u> </u>									
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, ≤ 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		
04-January-2017	9/27/2018 X JKG JKG Quality Assurance Signed by Gay, Jenna		



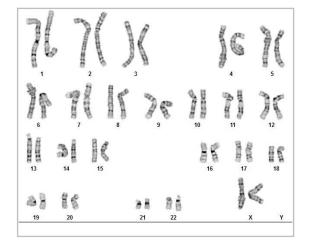
Chromosome Analysis Report: 072299

Date Reported: Tuesday, July 03, 2018
Cell Line: UCSD017i-3-5-WB54903 13839

Passage#: 24

Date of Sample: 6/28/2018 Specimen: Human IPS

Results: 46,XX



Cell Line Sex: Female

Reason for Testing: lot release testing

Investigator: WiCell

Cell: 9

Slide: G03

Slide Type: Karyotype

Total Counted: 20
Total Analyzed: 8

Total Karyogrammed: 4
Band Resolution: 350 - 525

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: , 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 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.



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:

13839-STR

Sample Name on Tube: 13839-STR

 $83.5 \text{ ng/}\mu\text{L}$, (A260/280=1.89)

Sample Type: Cells

Cell Count: ~2 million cells

Requestor:

WiCell Research Institute

Quality Department

Sample Date: N/A **Receive Date:** 07/02/18 **Assay Date:** 07/09/18

File Name: STR 1820710 wmr

Report Date: 07/16/18

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							
TPOX	6-13	information has							
D8S1179	7-18	been redacted to							
vWA	10-22	protect donor confidentiality. If							
Amelogenin	X,Y	more information							
Penta_D									
CSF1PO	6-15	please, contact							
D16S539									
D7S820	6-14	Support.							
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 13839-STR cells submitted by WiCell QA dated and received on 07/02/18, this sample (Label on Tube: 13839-STR) defines the STR profile of the human stem cell line UCSD017i-3-5 comprising 26 allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: No STR polymorphisms other than those corresponding to the human UCSD017i-3-5 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 13839-STR sample submitted corresponds to the UCSD017i-3-5 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 07/16/18 **Digitally Signed on** 07/16/18 **Digitally Signed on** 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 June 28, 2018

FORM SOP-QU-004.01 Version G Edition 02 Reported by: AP 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	UCSD017i-3-5-WB54903 13839	262	242	252	133	120	126.5	0.50	Negative	
2	Positive (+) Control	333	337	335	45221	45526	45374	135.44	Positive	
3	Negative (-) Control	667	700	683.5	75	74	74.5	0.11	Negative	

