



Thaw and Culture Details

Cell Line Name	UCSD165i-97-1
WiCell Lot Number	WB66795
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	p24 These cells were cultured for 23 passages prior to freeze and post reprogramming. WiCell adds +1 to the passage number at freeze to best represent what the overall passage number of the cells at thaw. Plated cells at thaw should be labeled passage 24.
Date Vialied	15-APRIL-2018
Vial Label	UCSD165i-97-1 p24 WB66795
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	≥ 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	Consistent with known 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.

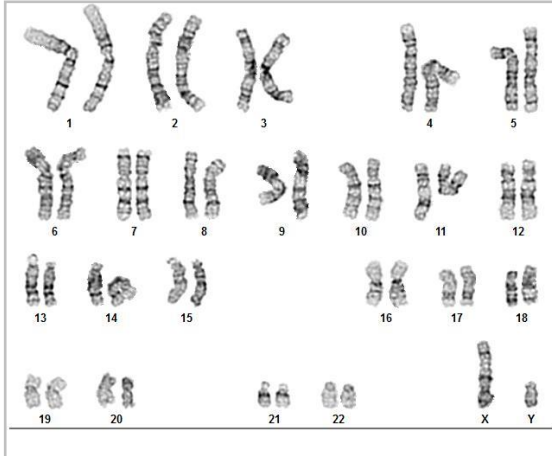
- Illumina® HumanCoreExome BeadChip Array
- RNA-Seq
- Flow Cytometry (SSEA-4, Tra 1-81)
- Infinium® Expanded Multi-Ethnic Genotyping Array (MEGA^{EX})



Approval Date	Quality Assurance Approval
20-August-2018	<p style="text-align: right;">8/20/2018</p> <p>X <u>JKG</u></p> <p><small>JKG Quality Assurance Signed by Gay, Jenna</small></p>

Date Reported: Tuesday, May 08, 2018
Cell Line: UCSD165i-97-1-WB66795 13665
Passage#: 24
Date of Sample: 5/1/2018
Specimen: Human IPS
Results: 46,XY

Cell Line Gender: Male
Reason for Testing: lot release testing
Investigator: [REDACTED], WiCell



Cell: 6
Slide: G02
Slide Type: Karyotype

Total Counted: 20
Total Analyzed: 8
Total Karyogrammed: 4
Band Resolution: 425 - 475

Interpretation:

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

Completed by: [REDACTED], 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 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.

Sample Report:

13665-STR

Sample Name on Tube: 13665-STR

86.7 ng/μL, (A260/280=1.86)

Sample Type: Cells**Cell Count:** ~2 million cells**Requestor:**

WiCell Research Institute

Quality Department

Sample Date: N/A**Receive Date:** 05/07/18**Assay Date:** 05/09/18**File Name:** STR 180510 wmr**Report Date:** 05/15/18

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 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 13665-STR cells submitted by WiCell QA dated and received on 05/07/18, this sample (Label on Tube: 13665-STR) exactly matches the STR profile of the human stem cell line UCSD165i-97-1 comprising 27 allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: No STR polymorphisms other than those corresponding to the human UCSD165i-97-1 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 13665-STR sample submitted corresponds to the UCSD165i-97-1 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%.



Digitally Signed on 05/15/18

[Redacted], BA
TRIP Laboratory, Molecular

Digitally Signed on 05/15/18

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

Native Product Sterility Report



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

SAMPLE #: 18050738
DATE RECEIVED: 10-May-18
TEST INITIATED: 14-May-18
TEST COMPLETED: 29-May-18

SAMPLE NAME / DESCRIPTION: UCSD165i-97-1 WB66795 13679
UCSD224i-NDC1-2 WB66797 13680
UCSD224i-NDC1-2 WB66798 13681
UWWC1-DS4 WB66799 13682
WC035i-SOD1-D90D WB66757 13683
JHU018i DB40957 13684
JHU032i DB36206 13685
JHU083i DB41146 13686
JHU126i DB36258 13687
JHU167i DB41380 13688
JHU190i DB36770 13689
JHU240i DB41420 13690
JHU054i DB41080 13691
JHU188i DB36766 13692
JHU084i DB41149 13693
JHU224i DB36895 13694
JHU250i DB36904 13695
JHU221i DB36885 13696
JHU218i DB36874 13697
JHU217i DB36868 13698

UNIQUE IDENTIFIER: NA
PRODUCT REGISTRATION: Other: 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

Native Product Sterility Report



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

COMMENTS: Sample #18050738

REVIEWED BY

A handwritten signature in blue ink, consisting of a large, stylized initial 'S' followed by a long, horizontal, wavy line.

DATE

30 MAY 18

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 30, 2018

FORM SOP-QU-004.01

Version G Edition 02

Reported by: AP

Reviewed by: DF

BD Monolight 180

#	Sample Name	Reading A			Reading B			Ratio B/A	Result	Comments/Suggestions
		RLU1	RLU2	Ave	RLU1	RLU2	Ave			
1	UCSD165i-97-1-WB66795 13665	282	242	262	95	106	100.5	0.38	Negative	
2	Positive (+) Control	385	394	389.5	13434	13623	13529	34.73	Positive	
3	Negative (-) Control	602	604	603	73	66	69.5	0.12	Negative	

