

Thaw and Culture Details

Cell Line Name	UCSD157i-12-3						
WiCell Lot Number	WB64922						
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 p30 These cells were cultured for 29 passages prior to freeze and post reprogramming. WiC the passage number to best represent the overall passage number of the cells at thaw.							
Date Vialed 09-May-2017							
Vial Label	UCSD157i-12-3 p30 WB64922						
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				
	WiCell	SOP-CH-003	Expected karyotype	See Report				
	Results: 46,XX Nonclonal findings: 45,XX,-9,i(9)(p10) 46,XX,del(9)(q10)							
	<i>Interpretation:</i> This is a normal karyotype; no clonal abnormalities were detected at the stated band							
Karyotype by G-banding			ngs, listed above, which contain chr					
			in cultures of this cell type. Nonclon					
		ct, but may be due to a	a developing clonal abnormality or to	o low-level				
	mosaicism.							
Doot Thom Viable Call			≥ 15 Undifferentiated Colonies,					
Post-Thaw Viable Cell	WiCell	SOP-CH-305	≤ 30% Differentiation and recoverable attachment after	Pass				
Recovery								
Identity by STR	UW Translational	PowerPlex 16 HS	passage					
identity by 3110	Research Initiatives in	System by	Defines profile	Pass				
	Pathology Laboratory	Promega	Defines profile	1 033				
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			
06-June-2017	9/16/2018 X JKG IKG Qualify Assurance Signed by Cay, Jenna			



Chromosome Analysis Report: 072104

Date Reported: Wednesday, June 20, 2018 Cell Line Sex: Female

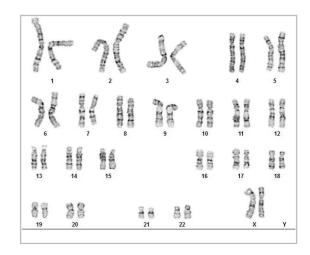
Cell Line: UCSD157i-12-3-WB64922 13732 Reason for Testing: lot release testing

Passage#: 30

Date of Sample: 6/14/2018 Investigator: WiCell Specimen: Human IPS

Results: 46,XX

Nonclonal findings: 45,XX,-9,i(9)(p10) 46,XX,del(9)(q10)



Cell: 19 Slide: G01

Slide Type: Karyotype

Total Counted: 20
Total Analyzed: 8
Total Karyogrammed: 4
Band Resolution: 400 - 575

Interpretation:

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

There are two nonclonal findings, listed above, which contain chromosomal aberrations not considered recurrently acquired in cultures of this cell type. Nonclonal findings may result from technical artifact, but may be due to a developing clonal abnormality or to low-level mosaicism.

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:

13732-STR

Sample Name on Tube: 13732-STR

 $119.2 \text{ ng/}\mu\text{L}$, (A260/280=1.89)

Sample Type: Cells

Cell Count: ~2 million cells

Requestor:

WiCell Research Institute

Quality Department

Sample Date: N/A **Receive Date:** 06/25/18 **Assay Date:** 06/26/18

File Name: STR 180627 wmr

Report Date: 07/05/18

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	<u> </u>							
CSF1PO	CSF1PO 6-15							
D16S539	5, 8-15	WiCell's Technical						
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 13732-STR cells submitted by WiCell OA dated and received on 06/25/18, this sample (Label on Tube: 13732-STR) defines the STR profile of the human stem cell line UCSD157i-12-3 comprising 25 allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: No STR polymorphisms other than those corresponding to the human UCSD157i-12-3 stem cell line were detected however, allelic imbalance (denoted by ** in table above) was observed at the D16S539 loci and could be the result of chromosomal gains and/or losses in this cell line. 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 13732-STR sample submitted corresponds to the UCSD157i-12-3 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 WMR \mathbf{X} RMB **Digitally Signed on** 07/05/18 **Digitally Signed on** 07/05/18 PhD, Director / Co-Director TRIP Laboratory, Molecular UWHC Molecular Diagnostics Laboratory / UWSMPH TRIP Laboratory

Native Product Sterility Report



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



SAMPLE #: 18020925
DATE RECEIVED: 15-Feb-18
TEST INITIATED: 20-Feb-18
TEST COMPLETED: 06-Mar-18

SAMPLE NAME / DESCRIPTION:

UCSD084i-6-1 WB61879 13391,UCSD089i-15-1 WB61822 13392 UCSD131i-77-1 WB62260 13393, UCSD134i-80-1 WB62286 13394 UCSD145i-89-1 WB61873 13395, UCSD156i-12-2 WB61889 13396 UCSD171i-100-1 WB62271 13397, UCSD174i-18-2 WB62018 13398 UCSD183i-102-1 WB62287 13399, UCSD186i-103-1 WB62268 13400 UCSD211i-32-1 WB62424 13401, UCSD087i-6-4 WB63448 13402 UCSD090i-15-2 WB62824 13403, UCSD120i-39-1 WB63446 13404 UCSD124i-7-1 WB62648 13405, UCSD149i-10-4 WB63469 13406 UCSD169i-22-2 WB63540 13407, UCSD203i-109-1 WB62436 13408 UCSD096i-34-1 WB64879 13409, UCSD101i-36-2 WB63523 13410 UCSD121i-39-2 WB64666 13411, UCSD122i-73-1 WB63538 13412 UCSD130i-76-1 WB64881 13413, UCSD138i-84-1 WB63874 13414 UCSD141i-37-2 WB65028 13415, UCSD144i-88-1 WB63539 13416 UCSD157i-12-3 WB64922 13417, UCSD159i-91-1 WB64880 13418 UCSD123i-74-1 WB53944 13419, UCSD126i-7-3 WB53933 13420 UCSD185i-8-2 WB54165 13421, UCSD086i-6-3 WB58711 13422 UCSD091i-15-3 WB58791 13423, UCSD118i-38-1 WB57664 13424 UCSD127i-7-4 WB58690 13425, UCSD137i-83-1 WB58970 13426 UCSD142i-86-1 WB58721 13427, UCSD146i-10-1 WB58698 13428 UCSD148i-10-3 WB58204 13429, UCSD162i-94-1 WB58792 13430 UCSD176i-17-1 WB58933 13431, UCSD177i-17-2 WB57849 13432 UCSD202i-108-1 WB57850 13433, UCSD205i-110-1 WB58200 13434 MCW038i-40000503 WB66475 13435, MCW005i-40002552 WB66498 13436 MCW019i-A7230 WB66534 13437, MCW022i-A2965 WB66509 13438 MCW023i-A2121 WB66535 13439, MCW027i-50000784 WB66536 13440

UNIQUE IDENTIFIER:

NA

PRODUCT REGISTRATION:

Other: Human iPS cells

Native Product Sterility Report



TEST RESULTS:

# Tested	# Positives (Growth)	- Control		
50	0	Negative		

TEST SUMMARY:

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

REFERENCE:

Processed according to LAB-003: Sterility Test Procedure

METHOD VALIDATION / PD #:

000053

TEST METHODOLOGY:

USP - Direct Transfer

COMMENTS:

Report revised due to incorrect Volume.

Sample #18020925

"Reported As" per packing slip

REVIEWED BY

DATE 10078

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 14, 2018

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

		Read	ing A	A Reading B		В	Ratio			
#	Sample Name	RLU1	RLU2	Ave	RLU1	RLU2	Ave	B/A	Result	Comments/Suggestions
1	UCSD157i-12-3-WB64922 13732	328	324	326	100	91	95.5	0.29	Negative	
2	Positive (+) Control	560	600	580	21715	21834	21775	37.54	Positive	
3	Negative (-) Control	910	902	560	91	87	89	0.16	Negative	

