

Thaw and Culture Details

Cell Line Name	UCSD190i-28-2							
WiCell Lot Number	WB58714							
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 p18 These cells were cultured for 17 passages prior to freeze and post reprogramming. WiCe to the passage number to best represent the overall passage number of the cells at thaw								
Date Vialed	31-January-2017							
Vial Label	UCSD190i-28-2 p18 WB58714							
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			
18-February-2017	9/27/2018 X JKG JKG Quality Assurance Signed by Gay, Jenna			



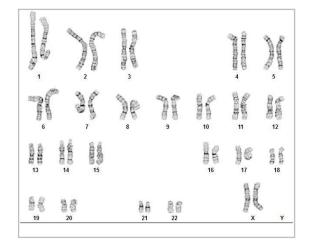
Chromosome Analysis Report: 072740

Date Reported: Thursday, August 09, 2018 Cell Line: UCSD190i-28-2-WB58714 13923

Passage#: 18

Date of Sample: 8/3/2018 Specimen: Human IPS

Results: 46,XX



Cell Line Sex: Female

Reason for Testing: Lot release testing

Investigator: WiCell

Cell: 2

Slide: G01

Slide Type: Karyotype

Total Counted: 20
Total Analyzed: 8

Total Karyogrammed: 4
Band Resolution: 475 - 500

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

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

Sample Report:

13846-STR

Sample Name on Tube: 13846-STR

 $98.5 \text{ ng/}\mu\text{L}, (A260/280=1.84)$

Sample Type: Cells

Cell Count: ~2 million cells

Requestor:

WiCell Research Institute Quality Department Sample Date: N/A Receive Date: 07/16/18 Assay Date: 07/17/18

File Name: STR 180718 wmr repeat

Report Date: 07/23/18

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							
TPOX	6-13	been redacted to protect donor							
D8S1179	7-18								
vWA									
Amelogenin	X,Y	more information is required,							
Penta_D	a_D 2.2, 3.2, 5, 7-17								
CSF1PO									
D16S539	5, 8-15	WiCell's Technical Support.							
D7S820	S820 6-14								
D13S317	7-15								
D5S818									
Penta_E	5-24	_							
D18S51	8-10, 10.2, 11-13, 13.2, 14-27								
D21S11									
TH01									
D3S1358	12-20								

<u>Results:</u> Based on the 13846-STR cells submitted by WiCell QA dated and received on 07/16/18, this sample (Label on Tube: 13846-STR) defines the STR profile of the human stem cell line UCSD190i-28-2 comprising 28 allelic polymorphisms across the 15 STR loci analyzed.

<u>Interpretation:</u> No STR polymorphisms other than those corresponding to the human UCSD190i-28-2 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 13846-STR sample submitted corresponds to the UCSD190i-28-2 stem cell line and was not contaminated with any other human stem cells or a significant amount of mouse feeder layer cells.

<u>Sensitivity:</u> 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 07/26/18

Note: The property of the

Native Product Sterility Report



WiCell

504 S Rosa Rd, Rm 101 Madison, WI 53719

CORRECTED REPORT

SAMPLE #:

17111201

DATE RECEIVED:

16-Nov-17

TEST INITIATED:

20-Nov-17

TEST COMPLETED:

04-Dec-17

SAMPLE NAME / DESCRIPTION:

iPS(Foreskin)-1-WB66667 13067 UCSD234i-SAD2-3-WB66668 13068 UCSD193i-106-1-WB57372 13069 UCSD178i-17-3-WB61149 13071 UCSD165i-97-1-WB64665 13072 WISC013i-SCID-DB66578 13073 WISC012i-SCA-DB66579 13074 UCSD067i-19-1-WB64878 13075 UCSD166i-98-1-WB59911 13076 UCSD210i-112-1-WB63447 13077 UCSD208i-111-1-WB58973 13079 UCSD160i-92-1-WB61150 13080 UCSD189i-28-1-WB60070 13081 UCSD190i-28-2-WB58714 13082 UCSD191i-13-1-WB65029 13083 UCSD196i-30-1-WB57099 13084 UCSD197i-30-2-WB54408 13085 UCSD202i-108-1-WB57850 13086 UCSD215i-113-1-WB59923 13087 STAN054i-149-2-WB66669 13088

UNIQUE IDENTIFIER:

NA

PRODUCT REGISTRATION:

Human iPS Cells

TEST RESULTS:

# Tested	# Positives (Growth)	- Control		
20	1	2 Negative		

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

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

LAB-003 rev 30 Form 5 Effective: 2017-08-29

Native Product Sterility Report



METHOD VALIDATION / PD #:

000053

TEST METHODOLOGY:

USP - Direct Transfer

CORRECTED REPORT

COMMENTS:

Report modified to correct the Sample Name / Description and # Positives.

Sample labeled UCSD208i-111-1-WB58973 13079 was positive in TSB and FTG.

Sample #17111201

REVIEWED BY

DATE 1 LICEUT

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 July 12, 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	UCSD190i-28-2-WB58714 13846	208	211	209.5	82	80	81	0.39	Negative	
2	Positive (+) Control	278	289	283.5	38511	38821	38666	136.39	Positive	
3	Negative (-) Control	636	654	645	65	71	68	0.11	Negative	

