

Thaw and Culture Details

Cell Line Name	UCSD170i-22-3						
WiCell Lot Number	WB60774						
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	p18 These cells were cultured for 17 passages prior to freeze and post reprogramming. WiCell adds +1 the passage number to best represent the overall passage number of the cells at thaw.						
Date Vialed	09-March-2017						
Vial Label	UCSD170i-22-3 p18 WB60774						
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	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			
26-April-2017	A/16,2018 X JKG NGG Qualify Assurance Signed by, Gay, Jenna			



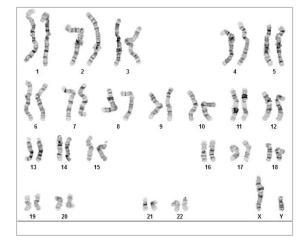
Chromosome Analysis Report: 071081

Date Reported: Wednesday, March 28, 2018 Cell Line: UCSD170i-22-3-WB60774 13584

Passage#: 18

Date of Sample: 3/21/2018 Specimen: Human IPS

Results: 46,XY



Cell Line Gender: Male

Reason for Testing: lot release testing

Investigator: , WiCell

Cell: 46 Slide: G02

Slide Type: Karyotype

Total Counted: 20
Total Analyzed: 8

Total Karyogrammed: 4
Band Resolution: 500 - 525

Interpretation:

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

Completed by:		
Reviewed and Interpreted by:	PhD, FACN	1G
A signed copy of this report is	available upon request.	

Date: Sent By: Sent To: QC Review By:	Date:	Sent By:	Sent To:	QC Review By:
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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.

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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:

13584-STR

Sample Name on Tube: 13584-STR

 $37.0 \text{ ng/}\mu\text{L}$, (A260/280=1.65)

Sample Type: Cells

Cell Count: ~2 million cells

Requestor:

WiCell Research Institute

Quality Department

Sample Date: N/A **Receive Date:** 03/26/18 **Assay Date:** 03/29/18

File Name: STR 180330 wmr

Report Date: 04/02/18

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				
D8S1179	7-18	protect donor				
vWA	10-22	confidentiality. If				
Amelogenin	X,Y	more information				
Penta_D	2.2, 3.2, 5, 7-17	is required,				
CSF1PO	6-15	please, contact WiCell's Technical				
D16S539	5, 8-15					
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 13584-STR cells submitted by WiCell QA dated and received on 03/26/18, this sample (Label on Tube: 13584-STR) defines STR profile of the human stem cell line UCSD170i-22-3 comprising 29 allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: No STR polymorphisms other than those corresponding to the human UCSD170i-22-3 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 13584-STR sample submitted corresponds to the UCSD170i-22-3 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 $\sim 2-5\%$.

X WMR \mathbf{X} RMB 04/04/18 **Digitally Signed on** 04/04/18 **Digitally Signed on** PhD, Director / Co-Director TRIP Laboratory, Molecular UWHC Molecular Diagnostics Laboratory / UWSMPH TRIP Laboratory

Native Product Sterility Report



SAMPLE #:

18031509

WiCell

DATE RECEIVED:

22-Mar-18

504 S Rosa Rd, Rm 101 Madison, WI 53719 TEST INITIATED:

26-Mar-18

TEST COMPLETED:

09-Apr-18

SAMPLE NAME / DESCRIPTION:

MCW047i-U2234 WB66742 13573 PENN105i-342-5 DB34860 13574 PENN144i-M7-16 DB36290 13575 PENN148i-M8-3 DB35007 13576 PENN150i-M7-9 DB35003 13577 PENN156i-M8-2 DB34864 13578 WISC015i-SC7 WB66749 13579 CREM032i-SS48-1 WB66748 13580

UCSD030i-23-2 WB58975 13581 UCSD170i-22-3 WB60774 13582

UNIQUE IDENTIFIER:

NA

PRODUCT REGISTRATION:

Other: Human iPS cells

TEST RESULTS:

# Tested	# Positives (Growth)	- Control		
10	0	2 Negatives		

TEST SUMMARY:

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

REFERENCE:

Processed according to LAB-003: Sterility Test Procedure

METHOD VALIDATION / PD #:

000053

TEST METHODOLOGY:

USP - Direct Transfer

COMMENTS:

Reported as, per packing slip

REVIEWED BY

DATE 10 APRIS

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 March 22, 2018 FORM SOP-QU-004.01 Version G Edition 02 Reported by: AP Reviewed by: JB BD Monolight 180

		Reading A A		A	Read	ling B	В	Ratio		
#	Sample Name	RLU1	RLU2	Ave	RLU1	RLU2	Ave	B/A	Result	Comments/Suggestions
1	UCSD170i-22-3-WB60774 13584	242	228	235	73	67	70	0.30	Negative	
2	Positive (+) Control	485	530	507.5	11283	11743	11513	22.69	Positive	
3	Negative (-) Control	826	858	842	107	103	105	0.12	Negative	

