

Thaw and Culture Details

Cell Line Name	UCSD175i-18-3
WiCell Lot Number	WB60837
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. WiCell adds +1 to the passage number to best represent the overall passage number of the cells at thaw.
Date Vialed	10-March-2017
Vial Label	UCSD175i-18-3 p18 WB60837
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	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 (MEGA^{EX})

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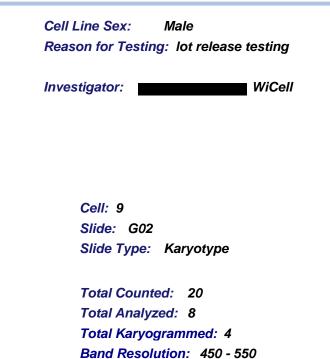
Approval Date	Quality Assurance Approval			
17-April-2017	9/6/2018 XG Quality Assurance Signed by Gay, Jenna			

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The material provided under this certificate has been subjected to the tests specified and the results and data described herein are accurate based on WiCell's reasonable knowledge and belief. Appropriate Biosafety Level practices and universal precautions should always be used with this material. For clarity, the foregoing is governed solely by WiCell's Terms and Conditions of Service, which can be found at http://www.wicell.org/privacyandterms.



Date Reported: Tuesday, May 29, 2018 Cell Line: UCSD175i-18-3-WB60837 13735 Passage#: 18 Date of Sample: 5/21/2018 Specimen: Human IPS Results: 46,XY



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, FACMG

A signed copy of this report is available upon request.

Date:	Sent Bv:	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.

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HISTOLOGY - IHC - MOLECULAR - IMAGING

Department of Pathology and Laboratory Medicine TRIP Laboratory (Molecular) http://www.pathology.wisc.edu/research/trip

Sample Report: 13735-STR Sample Name on Tube: 13735-STR 91.4 ng/μL, (A260/280=1.92) Sample Type: Cells Cell Count: ~2 million cells **Requestor:** WiCell Research Institute Quality Department

Short Tandem Repeat

Analysis

(888) 204-1782 Sample Date: N/A Receive Date: 05/29/18

Receive Date: 05/29/18 **Assay Date:** 05/29/18 **File Name:** STR 180530c wmr **Report Date:** 06/04/18

STR Locus	STR Genotype Repeat #	2, Identifying information has					
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						
TPOX	6-13	been redacted to					
D8S1179							
vWA	A 10-22						
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	39 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						

<u>Results:</u> Based on the 13735-STR cells submitted by WiCell QA dated and received on 05/29/18, this sample (Label on Tube: 13735-STR) defines the STR profile of the human stem cell line UCSD175i-18-3 comprising 25 allelic polymorphisms across the 15 STR loci analyzed.

<u>Interpretation:</u> No STR polymorphisms other than those corresponding to the human UCSD175i-18-3 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 13735-STR sample submitted corresponds to the UCSD175i-18-3 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%.

¹In this sample a microvariant exists at the Penta D loci with a size between 14 and 15.

X RMB Digitally Signed on 06/05/18	X WMR	Digitally Signed on	06/05/18
, BA TRIP Laboratory Molecular	UWHC Molecular	, PhD, Director / Co-Dire	

Testing was accomplished by analysis of human genetic polymorphisms at STR loci. This methodology has not yet been approved by the FDA and is for investigational use only. Acknowledge TRIP in your publications, posters & presentations. For details, see: http://www.pathology.wisc.edu/research/trip/acknowledging TRIP agrees to maintain the confidentiality of any information provided to it in connection with its performance of this STR analysis on the same conditions as set forth in paragraph 2 of WiCell's Terms and Conditions of Service (http://www.wicell.org/media.acux/1a429b84-2b54-44a4-8ad8-5c05db93dd8a).



Native Product Sterility Report



		SAMPLE #: 18020291						
WiCell		DATE RECEIVED: 06-Feb-						
504 S. Rosa Rd., Rm 101	L	TEST INITIATED: 07-Feb-						
Madison, WI 53719		TEST COMPLETED: 21-Feb-1						
SAMPLE NAME / DES	 CREM015i-SS16-1 WB66723 13311, CREM016i-SS18-1 WB66712 13312, CREM019i-SS25-1 WB66728 13313, CREM021i-SS29-1 WB66729 13314, H9- SOX2-GFP WB66727 13315, WC005i-FX11-7 WB20338 13316, WC009i-FX08 WB17924 13317, PENN015i-668-5 DB36410 13318, PENN029i-752-3 DB363 13319, PENN009i-57-52 DB35131 13320, PENN034i-322-1 DB34729 13321, PENN077i-521-1 DB36597 13322, PENN125i-233-4 DB35073 13323, PENN1 262-1 DB35081 13324, UCSD048i-52-1 WB66722 13325, UCSD08i-111-1 WB66730 13326, UCSD133i-79-1 WB61228 13327, UCSD152i-11-3 WB61665 13328, UCSD168i-22-1 WB61577 13329, UCSD170i-22-3 WB60774 13330, UCSD175i-18-3 WB60837 13331, UCSD066i-67-1 WB60392 13332, UCSD099 35-2 WB65030 13334, UCSD117i-72-1 WB60039 13335, UCSD119i-38-2 WB60256 13336, UCSD125i-7-2 WB59219 13337, UCSD128i-7-5 WB60297 13338, UCSD151i-11-2 WB59218 13339, UCSD158i-12-4 WB60020 13340, UCSD088i-6-5 WB53942 13341, UCSD147i-10-2 WB54174 13342, UCSD167i- 1 WB5407 13343, UCSD198i-23-1 WB54163 13344, UCSD098i-35-1 WB553 13345, UCSD100i-36-1 WB55400 13346, UCSD129i-75-1 WB65345 13349, UCSD173 18-1 WB54899 13350, UCSD187i-104-1 WB5539 13351, UCSD206i-31-1 WB54794 13352, UCSD217i-115-1 WB5509 13353, UCSD18i-116-1 WB554 13354, UCSD094i-25-1 WB55177 13355, UCSD095i-25-2 WB5780 13356, UCSD097i-34-2 WB57100 13357, UCSD113i-68-1 WB57056 13588, UCSD115 70-1 WB55081 13359, UCSD184i-8-1 WB57056 13588, UCSD115 70-1 WB55081 13351, UCSD184i-8-1 WB57056 13588, UCSD115 70-1 WB55082 13361 							
PRODUCT REGISTR	ATION:	Other: Human iPS o	cells					
TEST RESULTS:	# Tested	# Positives (Growth) - Control						
TEOTOURNARDY	50	0	3 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 METHODOLOG	34.	USP - Direct Transfer						
	~	Jon Dirottinali						

Native Product Sterility Report



COMMENTS: Sample # 18020291

REVIEWED BY 50

DATE 22 FEBIS

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 May 24, 2018 FORM SOP-QU-004.01 Version G Edition 02 Reported by: AP Reviewed by: DF BD Monolight 180

		Read	Reading A A Reading B		В	Ratio				
#	Sample Name	RLU1	RLU2	Ave	RLU1	RLU2	Ave	B/A	Result	Comments/Suggestions
1	UCSD175i-18-3-WB60837 13735	279	310	294.5	119	112	115.5	0.39	Negative	
2	Positive (+) Control	605	627	616	33968	34195	34082	55.33	Positive	
3	Negative (-) Control	1030	1010	1020	105	117	111	0.11	Negative	

