

Thaw and Culture Details

Cell Line Name	WC026i-5807-3				
WiCell Lot Number	WB66538				
Provider	University of Wisconsin – Laboratory of Anita Bhattacharyya				
Banked By	WiCell				
Thaw and Culture Recommendations	WiCell recommends thawing 1 vial into 3 wells of a 6 well plate.				
	Feeder Independent				
	Medium: mTeSR [™] 1				
	Matrix: Matrigel®				
Protocol	WiCell Feeder Independent mTeSR [™] 1 Protocol				
Passage Number p10 These cells were cultured for 9 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	17-August-2017				
Vial Label	WC026i-5807-3 p10 WB66538				
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	Pass
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

Approval Date	Quality Assurance Approval		
21-September-2017	9/21/2017 RK Quality Assurance Signed by Kremers, Erik		

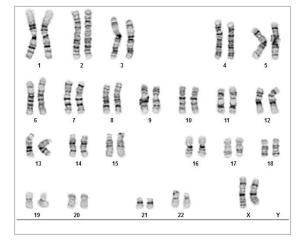
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The material provided under this certificate has been subjected to the tests specified and the results and data described herein are accurate based on WiCell's reasonable knowledge and belief. Appropriate Biosafety Level practices and universal precautions 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, September 12, 2017 Cell Line: WC026i-5807-3-WB66538 12802 Passage#: 10 Date of Sample: 8/29/2017 Specimen: Human IPS Results: 46,XX Cell Line Gender: Female Reason for Testing: lot release testing

Investigator: Sondra Minter, WiCell CDM



Cell: 9 Slide: G03 Slide Type: Karyotype

Total Counted: 20 Total Analyzed: 8 Total Karyogrammed: 4 Band Resolution: 425 - 600

Interpretation:

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

Completed by: Seth Taapken MS, CG(ASCP) Reviewed and Interpreted by: Kathy Richkind, PhD, FACMG

A signed copy of this report is available upon request.

		o	
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.

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Short Tandem Repeat Analysis

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

Sample Report: 12802-STR Sample Name on Tube: 12802-STR 31.6 ng/μL, (A260/280=2.49) Sample Type: Cells Cell Count: ~2 million cells

Requestor: WiCell Research Institute Quality Department WiCell[®] info@wicell.org (888) 204-1782

Sample Date: N/A Receive Date: 09/05/17 Assay Date: 09/12/17 File Name: 170913 STR WMR Report Date: 09/15/17

STR Locus	STR Genotype Repeat #	STR Genotype			
FGA	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	8,12			
D8S1179	7-18	13,14			
vWA	10-22	15,16			
Amelogenin	X,Y	X,X			
Penta_D	2.2, 3.2, 5, 7-17	9,13			
CSF1PO	6-15	12,12			
D16S539	5, 8-15	13,13			
D7S820	6-14	8,9			
D13S317	7-15	8,11			
D5S818	7-16	12,13			
Penta_E	5-24	11,17			
D18S51	8-10, 10.2, 11-13, 13.2, 14-27	14,15			
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	32.2,32.2			
TH01	4-9,9.3,10-11,13.3	7,8			
D3S1358	12-20	17,18			

<u>Results:</u> Based on the 12802-STR cells submitted by WiCell QA dated and received on 09/05/17, this sample (Label on Tube: 12802-STR) defines the STR profile of the human stem cell line WC026i-5807-3 comprising 27 allelic polymorphisms across the 15 STR loci analyzed.

<u>Interpretation:</u> No STR polymorphisms other than those corresponding to the human WC026i-5807-3 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 12802-STR sample submitted corresponds to the WC026i-5807-3 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%.

X RMB Digitally Signed on 09/15/17

X WMR Digitally Signed on

brauer PhD Director / Co-Director

09/15/17

Rebecca M. Baus TRIP Laboratory, Molecular William M. Rehrauer, PhD, Director / Co-Director UWHC Molecular Diagnostics Laboratory / UWSMPH TRIP Laboratory

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 #:	17081530
WiCell		DATE RECEIVED:	24-Aug-17
504 S Rosa Rd, Rm 101		TEST INITIATED:	25-Aug-17
Madison, WI 53719		TEST COMPLETED:	08-Sep-17
SAMPLE NAME / DESCRIPTION:	WA09-RB66490 12757		
	WA09-RB66492 12758		
	WA09-RB66493 12759		
	WC026i-5807-3 WB66538 12760		
	WC032i-6007-1-WB66540 12761		
	WC033i-6007-2-WB66539 12762		
	STAN008i-165-1-DB31100 12763		
	STAN009i-165-2-DB31110 12764		
	STAN053i-149-1-DB30924 12765		
	STAN001i-047-1-DB31118 12766		

UNIQUE IDENTIFIER: **PRODUCT REGISTRATION:**

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

NA

Human iPS cells

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 #: **TEST METHODOLOGY:**

000053

USP - Direct Transfer

Native Product Sterility Report



COMMENTS: Sample # 17081530

50-**REVIEWED BY**

DATE USEPI7

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 August 28, 2017 FORM SOP-QU-004.01 Version F Edition 02 Reported by: KR Reviewed by: JB Berthold Flash n' Glo 539

		Reading A A		Α	Read	ling B	В	Ratio		
#	Sample Name	RLU1	RLU2	Ave	RLU1	RLU2	Ave	B/A	Result	Comments/Suggestions
1	WC026i-5807-3-WB66538 12802	81	81	81	29	32	30.5	0.38	Negative	
2	Positive (+) Control	165	166	165.5	17611	17643	17627	106.51	Positive	
3	Negative (-) Control	257	263	260	36	30	33	0.13	Negative	

