



## Thaw and Culture Details

Cell Line Name	<b>JFWT4</b>
WiCell Lot Number	<b>WB66582</b>
Provider	Jain Foundation
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: TeSR™-E8™
	Matrix: Matrigel®
Protocol	WiCell Feeder Independent E8 Medium Protocol
Passage Number	p8 These cells were cultured for 7 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 Vialied	04-September-2017
Vial Label	JFWT4 p8 WB66582
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



## Testing Reported by Provider

*This testing was performed prior to banking unless otherwise specified.*

Test Description	Method	Result
Genetic Analysis	Karyotype by G-Banding	Normal Karyotype
Pluripotency	Multiplex RT-PCR to quantify endogenous expression of 7 genes. Scores generated from the analysis predict probability samples are iPSC-like.	Passing sample score $\geq 0.9$
Mycoplasma	Commercially available mycoplasma detection kit.	Negative
Human Virus Testing	HIV I/II CPT Code 87389; detects both antigen and antibodies for HIV I and HIV II. HBV CPT Code 87340; detects Hepatitis B surface antigen. HCV CPT Code 86803; Immunoassay detects Hepatitis C antibody.	Donor samples tested negative for the following human viruses. HIV I HIV II HBV HCV
Identity	Multiplex STR analysis of 9 commonly used alleles.	Match of iPS cell line to incoming donor material.

Approval Date	Quality Assurance Approval
12-October-17	<div style="display: flex; justify-content: space-between;"> <span>X JKG</span> <span>11/16/2017</span> </div> <div style="font-size: small; margin-top: 5px;">             JKG              Quality Assurance              Signed by Gay, Jenna           </div>

**Date Reported:** Monday, October 09, 2017

**Cell Line:** JFWT4-WB66582 12859

**Passage#:** 8

**Date of Sample:** 9/29/2017

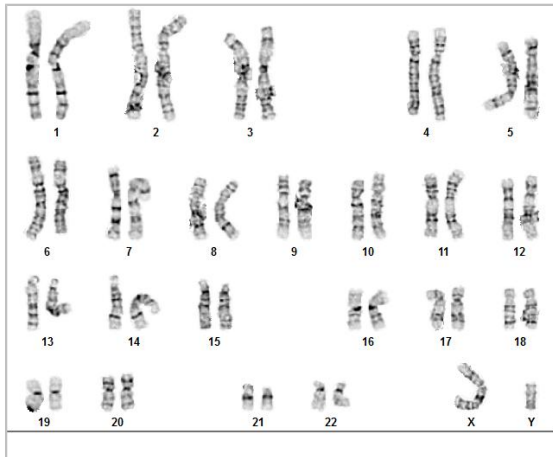
**Specimen:** Human IPS

**Results:** 46,XY

**Cell Line Gender:** Male

**Reason for Testing:** lot release testing

**Investigator:** [REDACTED]



**Cell:** 29

**Slide:** G01

**Slide Type:** Karyotype

**Total Counted:** 20

**Total Analyzed:** 8

**Total Karyogrammed:** 4

**Band Resolution:** 450 - 475

**Interpretation:**

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

**Completed by:** [REDACTED]  
**Reviewed and Interpreted by:** [REDACTED]

**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 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.*

*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](http://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

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:**

12859-STR  
**Sample Name on Tube:** 12859-STR  
67.1 ng/μL, (A260/280=1.92)  
**Sample Type:** Cells  
**Cell Count:** ~2 million cells

**Requestor:**

WiCell Research Institute  
Quality Department

**Sample Date:** N/A

**Receive Date:** 10/02/17  
**Assay Date:** 10/05/17  
**File Name:** STR 171006 wmr  
**Report Date:** 10/11/17

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 been redacted to protect donor confidentiality. If more information is required, please, contact <a href="#">WiCell's Technical Support</a> .
TPOX	6-13	
D8S1179	7-18	
vWA	10-22	
Amelogenin	X,Y	
Penta_D	2.2, 3.2, 5, 7-17	
CSF1PO	6-15	
D16S539	5, 8-15	
D7S820	6-14	
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 12859-STR cells submitted by WiCell QA dated and received on 10/05/17, this sample (Label on Tube: 12859-STR) defines the STR profile of the human stem cell line JFWT4 comprising 24 allelic polymorphisms across the 15 STR loci analyzed.

**Interpretation:** No STR polymorphisms other than those corresponding to the human JFWT4stem 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 12859-STR sample submitted corresponds to the JFWT4stem 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<sub>RMB</sub>** Digitally Signed on 10/12/17

TRIP Laboratory, Molecular

**X<sub>WMR</sub>** Digitally Signed on 10/12/17

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



**CORRECTED  
REPORT**

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

SAMPLE #: 17090875  
DATE RECEIVED: 14-Sep-17  
TEST INITIATED: 18-Sep-17  
TEST COMPLETED: 02-Oct-17

SAMPLE NAME / DESCRIPTION: MCW003i-40001883-WB66553\_12835, MCW047i-U2234-WB66549\_12836, MCW071i-U2177-WB66552\_12837, MCW086i-40000176-WB66545\_12838, MCW090i-40000374-WB66557\_12839, MCW091i-U2202-WB66554\_12840, MCW097i-400001654-WB66548\_12841, MCW112i-40000893-WB66551\_12842, MCW116i-40001890-WB66550\_12843, MCW073i-40000527-WB66570\_12844, MCW060i-U2183-WB66559\_12845, JFHZ4-WB66573\_12846, JFHZ5-WB66587\_12847, JFHZ6-WB66583\_12848, JFMD6-WB66581\_12849, JFNY2-WB66584\_12850, JFRBi5-WB66569\_12851, JFWT2-WB66586\_12852, JFWT4-WB66582\_12853, UCSD239i-APP2-1-WB66585\_12854, MCW100i-U2341-WB66575\_12881, MCW114i-U2144-WB66566\_12882, iPS(IMR90)-2-WB66588\_12883, UCSD035i-4-4-WB62259\_12884, UCSD064i-20-2-WB63303\_12885, UCSD143i-87-1-WB57685\_12886, UCSD161i-93-1-WB54536\_12887, UCSD199i-107-1-WB59910\_12888, UCSD209i-24-1-WB57661\_12889, UCSD081i-1-14-WB61903\_12890

UNIQUE IDENTIFIER: NA  
PRODUCT REGISTRATION: Other: Human iPS Cells

TEST RESULTS:

# Tested	# Positives (Growth)	- Control
30	0	2 Negatives

TEST SUMMARY:

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

REFERENCE: Processed according to LAB-003: Sterility Test Procedure  
METHOD VALIDATION / PD #: 000053  
TEST METHODOLOGY: USP - Direct Transfer

# Native Product Sterility Report

**CORRECTED  
REPORT**



# STERIS

**COMMENTS:**

Sample # 17090875

Report revised due to Customer request to update Sample Name / Description.

REVIEWED BY \_\_\_\_\_

DATE \_\_\_\_\_

09/04/17

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

Lot Release Testing

October 3, 2017

FORM SOP-QU-004.01

Version G Edition 02

Reported by: KR

Reviewed by: JB

BD Monolight 180

#	Sample Name	Reading A		A Ave	Reading B		B Ave	Ratio B/A	Result	Comments/Suggestions
		RLU1	RLU2		RLU1	RLU2				
1	JFWT4-WB66582 12859	254	261	257.5	89	86	87.5	0.34	Negative	
2	Positive (+) Control	439	428	433.5	32189	32447	32318	74.55	Positive	
3	Negative (-) Control	699	716	707.5	79	80	79.5	0.11	Negative	

