Thaw and Culture Details

Cell Line Name	JFWT2
WiCell Lot Number	WB66611
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 Vialed	26-September-2017
Vial Label	JFWT2 p8 WB66611
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	Consistent with known 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 ≥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.

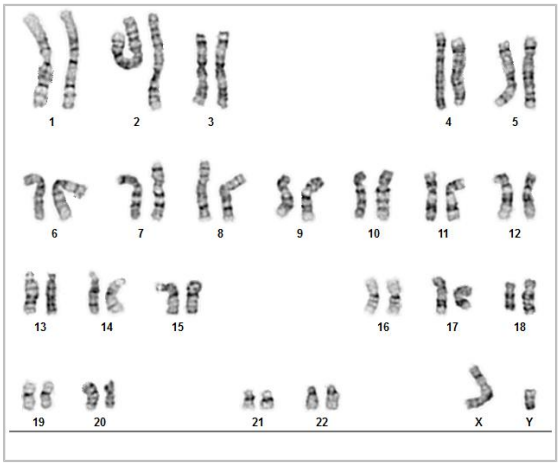
Approval Date	Quality Assurance Approval
14-November-2017	11/16/2017 X JKG JKG Quality Assurance Signed by: Gay, Jenna

Chromosome Analysis Report: 068704

Date Reported: Friday, October 13, 2017
Cell Line: JFWT2-WB66611 12946
Passage#: 8
Date of Sample: 10/5/2017
Specimen: Human IPS
Results: 46,XY

Cell Line Gender: Male
Reason for Testing: lot release testing
Investigator: [redacted], WiCell CDM

Nonclonal Findings: 46,XY,idic(6)(p22.1)



Cell: 39
Slide: G02
Slide Type: Karyotype

Total Counted: 20
Total Analyzed: 8
Total Karyogrammed: 4
Band Resolution: 400 - 475

Interpretation:

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

There is one nonclonal finding, listed above. Nonclonal findings likely result from technical artifact, but may be due to a developing clonal abnormality or to low-level mosaicism.

Completed by: [redacted] MS, CG(ASCP)
Reviewed and Interpreted by: [redacted], 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".

Short Tandem Repeat Analysis

School of Medicine and Public Health
UNIVERSITY OF WISCONSIN-MADISON
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:
12946-STR
Sample Name on Tube: 12946-STR
106.8 ng/µL, (A260/280=1.88)
Sample Type: Cells
Cell Count: ~2 million cells

Requestor:
WiCell Research Institute
Quality Department

Sample Date: N/A
Receive Date: 10/09/17
Assay Date: 10/10/17
File Name: 171011 STR WMR
Report Date: 10/12/17

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 WiCell's Technical Support.
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 12946-STR cells submitted by WiCell QA dated and received on 10/09/17, this sample (Label on Tube: 12946-STR) exactly matches the STR profile of the human stem cell line JFWT2 comprising 24 allelic polymorphisms across the 15 STR loci analyzed.**

Interpretation: **No STR polymorphisms other than those corresponding to the human JFWT2 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 12946-STR sample submitted corresponds to the JFWT2 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 ~2-5%.**

X *RMB* **Digitally Signed on 10/13/17**

[redacted]
TRIP Laboratory, Molecular

X *WMR* **Digitally Signed on 10/13/17**

[redacted] *PhD, Director / Co-Director*
UWHC Molecular Diagnostics Laboratory / UWSMPH TRIP Laboratory

Native Product Sterility Report

STERIS

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

SAMPLE #: 17100438
DATE RECEIVED: 05-Oct-17
TEST INITIATED: 09-Oct-17
TEST COMPLETED: 23-Oct-17

SAMPLE NAME / DESCRIPTION:
JFWT2-WB66611 12952
JFNY3-WB66644 12953
WC010i-CMT2A-1.1-WB66612 12954
WC011i-CMT2A-1.2-WB66645 12955
UCSD104i-2-3-WB54170 12957
UCSD105i-2-4-WB54134 12958
UCSD109i-2-8-WB60929 12959
UCSD110i-2-9-WB57062 12960
UCSD111i-2-10-WB54796 12961
UCSD103i-2-2-WB57649 12963

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: NA

REVIEWED BY Dersard DATE 24OCT17

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	JFWT2-WB66611 12946	266	288	277	104	89	96.5	0.35	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