



Thaw and Culture Details

Cell Line Name	UCSD103i-2-2
WiCell Lot Number	WB57649
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	p27 These cells were cultured for 26 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	17-January-2017
Vial Label	UCSD103i-2-2 p27 WB57649
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	Fail
	<p>Results: 46,XX,dup(20)(q11.2q11.2)[7]/46,XX[16] Interpretation: This is an abnormal karyotype. There is an interstitial duplication in the long arm of chromosome 20 in seven of twenty-three cells examined. This abnormality appears to be the recurrent acquired duplication in human pluripotent stem cell cultures. Confirmation of this abnormality by higher resolution (fluorescence in situ hybridization—FISH) testing is recommended. No other clonal abnormalities were found.</p>			
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})

Approval Date	Quality Assurance Approval
01-February-2017	<p style="text-align: right;">2/14/2018</p> <p>X HEB</p> <p><small>HEB Quality Assurance Signed by Bruner, Haley</small></p>



Chromosome Analysis Report: 069858

Date Reported: Friday, December 22, 2017

Cell Line: UCSD103i-2-2-WB57649 13179

Passage#: 27

Date of Sample: 12/18/2017

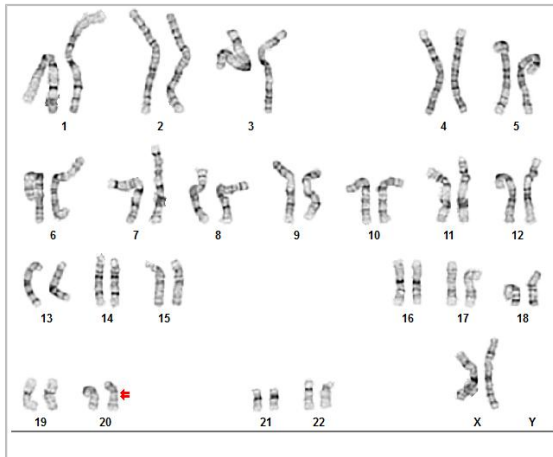
Specimen: Human iPSC

Results: 46,XX,dup(20)(q11.2q11.2)[7]/46,XX[16]

Cell Line Gender: Female

Reason for Testing: lot release testing

Investigator: [REDACTED], WiCell CDM



Cell: 45

Slide: G03

Slide Type: Karyotype

Total Counted: 23

Total Analyzed: 8

Total Karyogrammed: 4

Band Resolution: 450 - 525

Interpretation:

This is an abnormal karyotype. There is an interstitial duplication in the long arm of chromosome 20 in seven of twenty-three cells examined. This abnormality appears to be the recurrent acquired duplication in human pluripotent stem cell cultures. Confirmation of this abnormality by higher resolution (fluorescence in situ hybridization—FISH) testing is recommended. No other clonal abnormalities were found.

Completed by: [REDACTED], 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".

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. 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.

Sample Report:

13179-STR

Sample Name on Tube: 13179-STR

85.6 ng/μL, (A260/280=1.95)

Sample Type: Cells**Cell Count:** ~2 million cells**Requestor:**

WiCell Research Institute

Quality Department

Sample Date: N/A**Receive Date:** 01/02/18**Assay Date:** 01/04/18**File Name:** STR 180105 wmr**Report Date:** 01/10/18

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 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 13179-STR cells submitted by WiCell QA dated and received on 01/02/18, this sample (Label on Tube: 13179-STR) defines the STR profile of the human stem cell line UCSD103i-2-2 comprising 26 allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: No STR polymorphisms other than those corresponding to the human UCSD103i-2-2 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 13179-STR sample submitted corresponds to the UCSD103i-2-2 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%.



Digitally Signed on 01/11/18

[Redacted], BA
TRIP Laboratory, Molecular

Digitally Signed on 01/11/18

[Redacted], PhD, Director / Co-Director
UWHC Molecular Diagnostics Laboratory / UWSPH TRIP Laboratory

Native Product Sterility Report



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

DATE 24 OCT 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
December 21, 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	UCSD103i-2-2-WB57649 13179	192	199	195.5	77	78	77.5	0.40	Negative	
2	Positive (+) Control	395	377	386	15569	15667	15618	40.46	Positive	
3	Negative (-) Control	594	614	604	67	66	66.5	0.11	Negative	

