



## Thaw and Culture Details

Cell Line Name	UCSD002i-16-1
WiCell Lot Number	WB53932
Provider	University of California, San Diego – Dr. Kelly Frazer
Banked By	WiCell
Thaw and Culture Recommendations	WiCell recommends thawing 1 vial into 5 wells of a 6 well plate.
Culture Platform	Feeder Independent
	Medium: mTeSR™1
	Matrix: Matrigel®
Protocol	WiCell Feeder Independent mTeSR™1 Protocol
Passage Number	p31 These cells were cultured for 30 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	06-December-2016
Vial Label	UCSD002i-16-1 p31 WB53932
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
	<b>Results:</b> 47,XY,+i(12)(p10)[20] <b>Interpretation:</b> This is an abnormal karyotype showing an additional copy of an isochromosome ("i") of the short (p) arm of chromosome 12 in all cells analyzed. This imbalance results in tetrasomy for 12p. Extra copies of chromosome 12p are recurrent acquired aberrations in human pluripotent stem cell cultures. No other clonal abnormalities were found at the level of resolution achieved.			
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

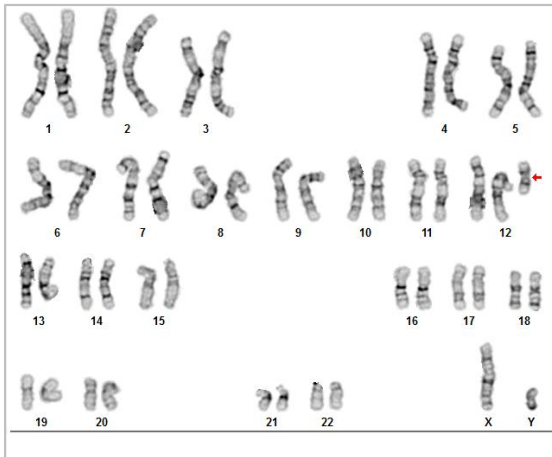
The Provider stated that some or all of the additional analyses listed below may have been performed for this cell line. For more information, publication and dbGaP links, where available, are provided on the cell line specific web page on the WiCell website.

- Illumina® HumanCoreExome BeadChip Array
- RNA-Seq
- Flow Cytometry (SSEA-4, Tra 1-81)
- Infinium® Expanded Multi-Ethnic Genotyping Array (MEGA<sup>EX</sup>)

Approval Date	Quality Assurance Approval
20-December-2016	<p style="text-align: right;">5/3/2018</p> <p>X JKG</p> <hr/> <p>JKG Quality Assurance Signed by Gay, Jenna</p>

**Date Reported:** Friday, April 13, 2018  
**Cell Line:** UCSD002i-16-1-WB53932 13561  
**Passage#:** 31  
**Date of Sample:** 4/9/2018  
**Specimen:** Human IPS  
**Results:** 47,XY,+i(12)(p10)[20]

**Cell Line Gender:** Male  
**Reason for Testing:** Lot release testing  
**Investigator:** [REDACTED] WiCell



**Cell:** 35  
**Slide:** G03  
**Slide Type:** Karyotype  
**Total Counted:** 20  
**Total Analyzed:** 8  
**Total Karyogrammed:** 4  
**Band Resolution:** 475 - 575

**Interpretation:**

**This is an abnormal karyotype showing an additional copy of an isochromosome (“i”) of the short (p) arm of chromosome 12 in all cells analyzed. This imbalance results in tetrasomy for 12p. Extra copies of chromosome 12p are recurrent acquired aberrations in human pluripotent stem cell cultures. No other clonal abnormalities were found at the level of resolution achieved.**

**Completed by:** [REDACTED], CG(ASCP)  
**Reviewed and Interpreted by:** [REDACTED], PhD, FACMGG  
**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.*

**Sample Report:**

13561-STR

**Sample Name on Tube:** 13561-STR

81.3 ng/μL, (A260/280=1.87)

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

WiCell Research Institute

Quality Department

**Sample Date:** N/A**Receive Date:** 04/16/18**Assay Date:** 04/19/18**File Name:** STR 180420 wmr**Report Date:** 04/27/18

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 <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 13561-STR cells submitted by WiCell QA dated and received on 04/16/18, this sample (Label on Tube: 13561-STR) defines the STR profile of the human stem cell line UCSD002i-16-1 comprising 26 allelic polymorphisms across the 15 STR loci analyzed.

**Interpretation:** No STR polymorphisms other than those corresponding to the human UCSD002i-16-1 stem cell line were detected however, allelic imbalance (denoted by \*\* in table above) was observed at the vWA loci and could be the result of chromosomal gains and/or losses in this cell line. 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 13561-STR sample submitted corresponds to the UCSD002i-16-1 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 04/30/18

[Redacted], BA  
TRIP Laboratory, Molecular

Digitally Signed on 04/30/18

[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 #: 17110123  
DATE RECEIVED: 02-Nov-17  
TEST INITIATED: 06-Nov-17  
TEST COMPLETED: 20-Nov-17

SAMPLE NAME / DESCRIPTION: iPS(Foreskin)-2-WB66647 13010  
iPS(Foreskin)-3-WB66648 13011  
UCSD206i-31-1-DB25304 13013  
UCSD206i-31-1-WB66653 13014  
UCSD207i-31-2-DB25300 13015  
UCSD207i-31-2-WB66652 13016  
USCD112i-2-11-DB25859 13017  
UCSD002i-16-1-WB53932 13018  
UCSD201i-4-2-WB63302 13019  
UCSD004i-42-1-WB54900 13020

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 20NOV17



# Mycoplasma Detection Assay Report

Testing Performed by WiCell

Lot Release Testing

April 09, 2018

FORM SOP-QU-004.01

Version G Edition 02

Reported by: AP

Reviewed by: DF

BD Monolight 180

#	Sample Name	Reading A		A Ave	Reading B		B Ave	Ratio B/A	Result	Comments/Suggestions
		RLU1	RLU2		RLU1	RLU2				
1	UCSD002i-16-1-WB53932 13561	278	291	284.5	96	96	96	0.34	Negative	
2	Positive (+) Control	602	603	602.5	26317	26406	26362	43.75	Positive	
3	Negative (-) Control	873	884	878.5	93	93	93	0.11	Negative	

