



# Certificate of Analysis

## Thaw and Culture Details


Cell Line Name	<b>UCSD182i-3-2</b>	
WiCell Lot Number	<b>DB68096</b>	
Provider/Client	University of California, San Diego – Dr. Kelly Frazer	
Banked By	University of California, San Diego – Dr. Kelly Frazer	
Thaw and Culture Recommendations	WiCell recommends thawing 1 vial into 1 well of a 6 well plate using mTeSR™ 1 and Cultrex.® WiCell recommends passaging with ROCK Inhibitor.	
Protocol	WiCell Feeder Independent Pluripotent Stem Cell Protocol	
Culture Platform Prior to Freeze	mTeSR™ 1	Matrigel®
Passage Number	p27 Cells were cultured for 27 passages prior to freeze. Plated cells at thaw should be labeled passage 28.	
Date Vialied	11-March-2016	
Vial Label	T036_C11_iPSC_P27  JO_20160311	
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.	



# Certificate of Analysis

## Results

Test Description	Test Provider	Test Method	Test Specification	Result
Karyotype	WiCell	G-T-L Banding performed on 20 metaphase cells	Expected karyotype	See Report
	<p><b>Results:</b> 46,XX,dup(20)(q11.2q11.2)[20]  <b>Interpretation:</b> This is an abnormal karyotype. There is an interstitial duplication in the long (q) arm of chromosome 20 in twenty of twenty cells examined. There is a known recurrent acquired duplication at this location in human pluripotent stem cell cultures; we recommend that this abnormality be confirmed by higher resolution testing. No other clonal abnormalities were detected at the stated band level of resolution</p>			
Post-Thaw Viable Cell Recovery	WiCell	Thaw using specified Thaw & Culture Recommendations	Recoverable attachment after passage	Pass
Identity by STR	WiCell	PowerPlex 16 HS System by Promega™	Consistent with STR profile of deposited cell line	See Report
Mycoplasma	WiCell	PCR	Amplification of mycoplasma specific DNA detected with negative result	Pass
Sterility	Steris	Native Product Direct Transfer using FTM and TSB (ST/07)	Negative for growth following 14 days of culture	Pass

Approval Date	WiCell Quality Assurance Approval
21-September-2023	<p style="text-align: right;">9/21/2023</p>  <p>X HEB  HEB  WiCell Quality Assurance  Signed by Bruner, Haley</p>

**Date Reported:** Tuesday, June 27, 2023

**Cell Line:** UCSD182i-3-2-DB68096

**Submitted Passage #:** 29

**Date of Sample:** 6/19/2023

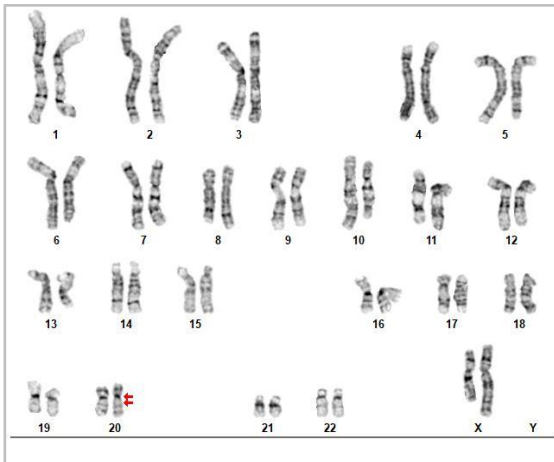
**Specimen:** Human iPSC

**Results:** 46,XX,dup(20)(q11.2q11.2)[20]

**Cell Line Sex:** Female

**Reason for Testing:** LOT\_RELEASE

**Investigator:** WiCell Stem Cell Bank, WiCell



**Cell:** 30

**Slide:** G01

**Slide Type:** Karyotype

**Total Counted:** 20

**Total Analyzed:** 8

**Total Karyogrammed:** 4

**Band Resolution:** 450 - 475

### Interpretation:

**This is an abnormal karyotype. There is an interstitial duplication in the long (q) arm of chromosome 20 in twenty of twenty cells examined. There is a known recurrent acquired duplication at this location in human pluripotent stem cell cultures; we recommend that this abnormality be confirmed by higher resolution testing. No other clonal abnormalities were detected at the stated band level of resolution.**

**Completed by:** Jennifer Pecos, CG(ASCP)

**Reviewed and Interpreted by:** Vanessa Horner, PhD, FACMG

For internal use only

**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 of this assay are for research use only. 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

Requestor: WiCell Stem Cell Bank, WiCell

Samples Received: 19Jun23

STR Amplification Date: 28Jun23

Form SOP-89.01

Version 9.0

<b>Sample Name</b>	<b>UCSD182i-3-2-DB68096 p29</b>
<b>WiCell CTR No.<sup>1</sup></b>	Identifying information has been redacted to protect donor confidentiality. If more information is required, please contact <a href="mailto:info@wicell.org">info@wicell.org</a>
<b>FGA</b>	
<b>TPOX</b>	
<b>D8S1179</b>	
<b>vWA</b>	
<b>Amelogenin</b>	
<b>Penta_D</b>	
<b>CSF1PO</b>	
<b>D16S539</b>	
<b>D7S820</b>	
<b>D13S317</b>	
<b>D5S818</b>	
<b>Penta_E</b>	
<b>D18S51</b>	
<b>D21S11</b>	
<b>TH01</b>	
<b>D3S1358</b>	
<b>Allelic Polymorphisms</b>	26
<b>Matches*</b>	73192, 72296, 72297, 72643
<b>Comments</b>	

*\*Note: The STR profile of the following sample is a 100% match for the given sample/samples unless otherwise specified.*

<sup>1</sup> CTR No.: Characterization Test Request Number; also known as a laboratory accessioning number.



# Short Tandem Repeat

Requestor: WiCell Stem Cell Bank, WiCell

Samples Received: 19Jun23

STR Amplification Date: 28Jun23

Form SOP-89.01

Version 9.0

**Assay Description:** STR analysis is performed using the PowerPlex 16 HS System by Promega™. Results are reported as 13 CODIS STR markers, Amelogenin for gender determination and two low-stutter, highly discriminating pentanucleotide STR markers.

**Results:** The genotypic profiles comprise a range of 26 allelic polymorphisms across the 15 STR loci analyzed.

**Interpretation:** 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. These results suggests that the cells submitted correspond to the cell lines as named and were not contaminated with any other human 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 cell lines is ~2-4%.

6/29/2023	7/6/2023	7/7/2023
<b>X</b> Amber Kuhn	<b>X</b> Anna Lisa Larson	<b>X</b> Ryen Smith
Tech #1 Characterization Signed by: Kuhn, Amber	Tech #2 Characterization Signed by: Larson, Anna Lisa	QA Review Quality Assurance Signed by: Smith, Ryen

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# Mycoplasma Assay Report

PCR-based assay performed by WiCell  
WiCell Stem Cell Bank, WiCell  
13 June 23

Form SOP-83.01  
Version 5.0

Sample Name	Result	Interpretation
UCSD247i-LQT1-2-DB68095 p22 (97566)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
UCSD182i-3-2-DB68096 p28 (97565)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
Positive (+) Control	Positive	
Negative (-) Control	Negative	

Assay Description
Sample is tested for presence of mycoplasma using EZ-PCR™ Mycoplasma Detection Kit (Sartorius).

6/13/2023	6/14/2023	6/14/2023
<b>X</b> Cheyenne Boatman <hr/> Tech #1 Characterization Signed by: Boatman, Cheyenne	<b>X</b> Amber Kuhn <hr/> Tech #2 Characterization Signed by: Kuhn, Amber	<b>X</b> Dawn Graham <hr/> QA Review Quality Assurance Signed by: Graham, Dawn

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*A gel image is available upon request.*

# Native Product Sterility Report



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

SAMPLE #: 23040601  
DATE RECEIVED: 13-Apr-23  
TEST INITIATED: 14-Apr-23  
TEST COMPLETED: 28-Apr-23

SAMPLE NAME / DESCRIPTION: PACS2iPS01-C5-DB68076  
WA09-WB68097  
HES7-NLuc-2A-tdtomato-DB68082  
H9 T-2A-EGFP-PGK-DB68085  
H1-Fucci-DB68086  
H1 MYH11-NLuc-tdTomato-DB68087  
HES7-NLuc-2A-tdtomato-DB68090  
JHU255i-DB37129  
JHU256i-DB37132  
JHU257i-DB37136  
UCSD242i-LQT1-1-DB68089  
UCSD243i-LQT3-1-DB68091  
UCSD244i-LQT3-2-DB68092  
UCSD245i-CNTL-1-DB68093  
UCSD246i-CNTL-2-DB68094  
UCSD247i-LQT1-2-DB68095  
UCSD182i-3-2-DB68096  
JHU252i-DB37121  
JHU013i-2-DB40951  
JHU022i-DB40963

UNIQUE IDENTIFIER: N/A

## TEST RESULTS:

# Tested	# Positives (Growth)	- Control
20	1	2 Negatives

## TEST SUMMARY:

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

# Native Product Sterility Report



REFERENCE: Processed according to LAB-003: Sterility Test Procedure

PD #: 000053

TEST METHODOLOGY: USP - Direct Transfer

COMMENTS: Sample #23040601

Sample labeled H1myh11 c5 p28 5cm2 jab 28AUG17 is positive for both TSB and FTG media.

AUTHORIZED BY \_\_\_\_\_

A handwritten signature in blue ink, appearing to be "AD", written over a horizontal line.

DATE 09 MAY 2023

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. Results applied to samples as received.