



## Thaw and Culture Details

|                                  |                                                                                                                                                                                                                                                                                                                                                                                                            |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cell Line Name                   | UCSD174i-18-2                                                                                                                                                                                                                                                                                                                                                                                              |
| WiCell Lot Number                | DB25465                                                                                                                                                                                                                                                                                                                                                                                                    |
| Provider                         | 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. WiCell recommends thawing using ROCK Inhibitor for best results. The Provider recommends only dispase passaging.                                                                                                                                                                                                                           |
| Culture Platform                 | Feeder Independent                                                                                                                                                                                                                                                                                                                                                                                         |
|                                  | Medium: mTeSR™1                                                                                                                                                                                                                                                                                                                                                                                            |
|                                  | Matrix: Matrigel®                                                                                                                                                                                                                                                                                                                                                                                          |
| Protocol                         | WiCell Feeder Independent mTeSR™1 Protocol                                                                                                                                                                                                                                                                                                                                                                 |
| Passage Number                   | p12<br>These cells were cultured for 12 passages prior to freeze and post reprogramming. Add +1 to the passage number to best represent the overall passage number of the cells at thaw.                                                                                                                                                                                                                   |
| Date Vialied                     | 05-May-2014                                                                                                                                                                                                                                                                                                                                                                                                |
| Vial Label                       | S12002–Sendai-iPS c5 p12<br>MTG/TeSR<br>CARDiPS Project<br>VM 5/5/14                                                                                                                                                                                                                                                                                                                                       |
| 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.<br>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                        | 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                                                                                        |
|---------------|-------------------------------------------------------------------------------------------------------------------|
| 02-June-2016  | <div>12/6/2017</div> <div>X JKG</div> <div>JKG</div> <div>Quality Assurance</div> <div>Signed by Gay, Jenna</div> |

**Date Reported:** Wednesday, November 15, 2017

**Cell Line Gender:** Female

**Cell Line:** UCSD174i-18-2-DB25465 13042

**Reason for Testing:** lot release testing

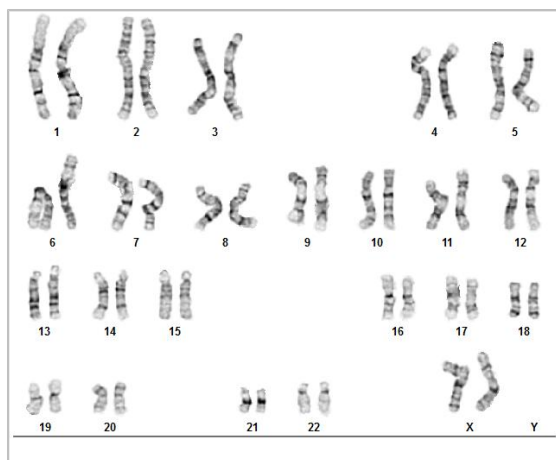
**Passage#:** 14

**Date of Sample:** 11/9/2017

**Investigator:** [REDACTED], WiCell CDM

**Specimen:** Human IPSC

**Results:** 46,XX



**Cell:** 32

**Slide:** G02

**Slide Type:** Karyotype

**Total Counted:** 20

**Total Analyzed:** 8

**Total Karyogrammed:** 4

**Band Resolution:** 475 - 550

## Interpretation:

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

**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".*

*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.*

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HISTOLOGY - IHC - MOLECULAR - IMAGING

Department of Pathology and Laboratory Medicine

TRIP Laboratory (Molecular)

<http://www.pathology.wisc.edu/research/trip>

# Short Tandem Repeat Analysis



WiCell®

[info@wicell.org](mailto:info@wicell.org)

(888) 204-1782

## Sample Report:

13042-STR

Sample Name on Tube: 13042-STR

39.0 ng/μL, (A260/280=2.07)

Sample Type: Cells

Cell Count: ~2 million cells

## Requestor:

WiCell Research Institute

Quality Department

Sample Date: N/A

Receive Date: 11/13/17

Assay Date: 11/16/17

File Name: STR 171120 wmr

Report Date: 11/21/17

| 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 13042-STR cells submitted by WiCell QA dated and received on 11/13/17, this sample (Label on Tube: 13042-STR) defines the STR profile of the human stem cell line UCSD174i-18-2 comprising 28 allelic polymorphisms across the 15 STR loci analyzed.

**Interpretation:** No STR polymorphisms other than those corresponding to the human UCSD174i-18-2 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 13042-STR sample submitted corresponds to the UCSD174i-18-2 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%.

X<sub>RMB</sub>

Digitally Signed on 11/22/17

\_\_\_\_\_, BA  
TRIP Laboratory, Molecular

X<sub>WMR</sub>

Digitally Signed on 11/22/17

\_\_\_\_\_, 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



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

SAMPLE #: 17110775  
DATE RECEIVED: 09-Nov-17  
TEST INITIATED: 14-Nov-17  
TEST COMPLETED: 28-Nov-17

SAMPLE NAME / DESCRIPTION: JHU019i-DB40960 13048  
JHU050i-DB41074 13049  
JHU199i-DB36795 13050  
JHU206i-DB36823 13051  
UCSD112i-2-11-WB66654 13052  
UCSD177i-17-2-DB25459 13053  
UCSD125i-7-2-DB25462 13054  
UCSD174i-18-2-DB25465 13055  
JHU002i-1-DB40935 13056  
JHU004i-2-DB40945 13057

UNIQUE IDENTIFIER: NA  
PRODUCT REGISTRATION: Human iPS cells

## TEST RESULTS:

| # Tested | # Positives<br>(Growth) | - Control   |
|----------|-------------------------|-------------|
| 10       | 0                       | 2 Negatives |

## TEST SUMMARY:

| # Samples | Media Type | Volume (mL) | Incubation<br>Temperature<br>(° C) | Incubation<br>Duration<br>(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

Desad

DATE

01DEC17

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

November 2, 2017

FORM SOP-QU-004.01

Version G Edition 02

Reported by: KR

Reviewed by: JB

BD Monolight 180

| # | Sample Name                 | Reading A |      | A<br>Ave | Reading B |       | B<br>Ave | Ratio<br>B/A | Result   | Comments/Suggestions |
|---|-----------------------------|-----------|------|----------|-----------|-------|----------|--------------|----------|----------------------|
|   |                             | RLU1      | RLU2 |          | RLU1      | RLU2  |          |              |          |                      |
| 1 | UCSD174i-18-2-DB25465 13042 | 223       | 222  | 222.5    | 100       | 99    | 99.5     | 0.45         | Negative |                      |
| 2 | Positive (+) Control        | 323       | 311  | 317      | 28241     | 28381 | 28311    | 89.31        | Positive |                      |
| 3 | Negative (-) Control        | 563       | 577  | 570      | 63        | 61    | 62       | 0.11         | Negative |                      |

