

### Thaw and Culture Details

| Cell Line Name                      | JHU250i  |  |  |
|-------------------------------------|--|--|--|
| WiCell Lot Number                   | DB36904  |  |  |
| Provider                            | Johns Hopkins University – Laboratory of Dr. Lewis Becker  |  |  |
| Banked By                           | Johns Hopkins University – Laboratory of Dr. Lewis Becker  |  |  |
| Thaw and Culture<br>Recommendations | WiCell recommends thawing 1 vial into 4 wells of a 6 well plate using TeSR <sup>™</sup> -E8 <sup>™</sup> and Recombinant Human Vitronectin. WiCell recommends thawing using ROCK Inhibitor for best results.   |  |  |
| Protocol                            | WiCell Feeder Independent Pluripotent Stem Cell Protocol   |  |  |
| Culture Platform Prior to Freeze    | Feeder Independent   |  |  |
|                                     | Medium: E8   |  |  |
|                                     | Matrix: Vitronectin  |  |  |
| Passage Number                      | p7<br>These cells were cultured for 7 passages post reprogramming prior to freeze. Add +1 to the passage<br>number to best represent the overall passage number of the cells at thaw.  |  |  |
| Date Vialed                         | 03-September-2015  |  |  |
| Vial Label                          | P250<br>P7<br>1.5x10^6<br>9/3/15   |  |  |
| Biosafety and Use Information       | This cell line is of human origin. 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-49                                  | Expected karyotype                         | See Report |
| Post-Thaw Viable Cell<br>Recovery | WiCell        | SOP-99                                  | Recoverable attachment after<br>passage    | Pass       |
| Identity by STR                   | WiCell        | PowerPlex 16 HS<br>System by<br>Promega | Defines STR profile of deposited cell line | Pass       |
| Sterility                         | Steris        | ST/07                                   | Negative                                   | Pass       |
| Mycoplasma                        | WiCell        | SOP-79                                  | 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.

- Embryoid bodies
- Infinium<sup>®</sup> Expanded Multi-Ethnic Genotyping Array (MEGA<sup>EX</sup>)

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| Approval Date | Quality Assurance Approval                                     |
|---------------|--|
| 14-July-2016  | 12/2/2020<br>X JKG<br>Guilip Assurance<br>Signed by Gay, Jenna |

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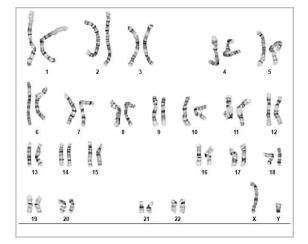
The material provided under this certificate has been subjected to the tests specified and the results and data described herein are accurate based on WiCell's reasonable knowledge and belief. Appropriate Biosafety Level practices and universal precautions should always be used with this material. For clarity, the foregoing is governed solely by WiCell's Terms and Conditions of Service, which can be found at http://www.wicell.org/privacyandterms.



Chromosome Analysis Report: 083687

Date Reported: Tuesday, November 17, 2020 Cell Line: JHU250i-DB36904 Submitted Passage #: 8 Date of Sample: 11/6/2020 Specimen: Human IPSC Results: 46,XY Cell Line Sex: Male Reason for Testing: LOT\_RELEASE

Investigator: WiCell Stem Cell Bank, WiCell



Cell: 63 Slide: G03 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:<br>Reviewed and Interpreted by: | , PhD, FACMG |          |               |
|---|--------------|----------|---------------|
| 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. 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: 02Nov20, 06Nov20 STR Amplification Date: 11Nov20 Form SOP-89.01 Version 2.0

|                       | WA09-RB67589 | JHU105i-  | JHU148i-DB36280 | JHU102i-DB41279 | JHU250i-    | JHU173i-DB36380             |
|-----------------------|--------------|---|-----------------|-----------------|-------------|-----------------------------|
| Sample Name           | p.30         | DB36241 p.5   | p.7             | p.5             | DB36904 p.8 | p.10                        |
| Label on tube         | 83593        | 83677   | 83678           | 83679           | 83687       | 83688                       |
| FGA                   |              |   |                 |                 |             |                             |
| ΤΡΟΧ                  |              |   |                 |                 |             |                             |
| D8S1179               |              |   |                 |                 |             |                             |
| vWA                   |              |   |                 |                 |             |                             |
| Amelogenin            |              |   | Identifyi       | ng              |             |                             |
| Penta_D               |              | information has<br>been redacted to<br>protect donor<br>confidentiality. If<br>more information<br>is required,<br>please contact |                 |                 |             |                             |
| CSF1PO                |              |   |                 |                 |             |                             |
| D16S539               |              |   |                 |                 |             |                             |
| D7S820                |              |   |                 |                 |             |                             |
| D13S317               |              |   |                 |                 |             |                             |
| D5S818                |              | info@wicell.org   |                 |                 |             |                             |
| Penta_E               |              |   |                 |                 |             |                             |
| D18S51                |              |   |                 |                 |             |                             |
| D21S11                |              |   |                 |                 |             |                             |
| TH01                  |              |   |                 |                 |             |                             |
| D3S1358               |              |   |                 |                 |             |                             |
| Allelic Polymorphisms | 24           | 30  | 27              | 25              | 25          | 43                          |
| Matches*              | See Matches  |   |                 |                 |             |                             |
| watches *             | Comment      |   |                 |                 |             | See Mixed Cell              |
| Comments              |              |   |                 |                 |             | See Mixed Cell Line Comment |

\*Note: The STR profile of the following sample is an exact match for the given sample/samples.



## Short Tandem Repeat

Requestor: WiCell Stem Cell Bank, WiCell Samples Received: 02Nov20, 06Nov20 STR Amplification Date: 11Nov20 Form SOP-89.01 Version 2.0

**Results:** The genotypic profiles comprise a range of 24-43 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 ~2-5%.

**Mixed Cell Line:** Sample 83688 shows signs of possible contamination. The most likely explanation for this result is that two cultures have been mixed. G-banded karyotype results confirmed the presence of both male and female cells in the culture. Please resubmit this sample.

<u>Matches:</u> Sample 83593 is an exact match to 14630, 74319, 74844, 74924, and 74925.

| 12/1,            | /2020            | 12/1/2020         | 12/1/2020 |
|------------------|------------------|-------------------|-----------|
| X                | X                | X                 |           |
| Tech #1          | Tech #2          | QA Review         |           |
| Characterization | Characterization | Quality Assurance |           |
| Signed by:       | Signed by:       | Signed by:        |           |

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Raw data is available upon request.

# Native Product Sterility Report



|                            | SAMPLE #:   | 18050738  |
|----------------------------|---|-----------|
| WiCell                     | DATE RECEIVED:  | 10-May-18 |
| 504 S Rosa Rd, Rm 101      | TEST INITIATED:   | 14-May-18 |
| Madison, WI 53719          | TEST COMPLETED:   | 29-May-18 |
| SAMPLE NAME / DESCRIPTION: | UCSD165i-97-1 WB66795 13679<br>UCSD224i-NDC1-2 WB66797 13680<br>UCSD224i-NDC1-2 WB66798 13681 |           |
|                            | UWWC1-DS4 WB66799 13682   |           |
|                            | WC035i-SOD1-D90D WB66757 13683  |           |
|                            | JHU018i DB40957 13684   |           |
|                            | JHU032i DB36206 13685   |           |
|                            | JHU083i DB41146 13686   |           |
|                            | JHU126i DB36258 13687   |           |
|                            | JHU167i DB41380 13688   |           |
|                            | JHU190i DB36770 13689   |           |
|                            | JHU240i DB41420 13690   |           |
|                            | JHU054i DB41080 13691   |           |
|                            | JHU188i DB36766 13692   |           |
|                            | JHU084i DB41149 13693   |           |
|                            | JHU224i DB36895 13694   |           |
|                            | JHU250i DB36904 13695   |           |
|                            | JHU221i DB36885 13696   |           |
|                            | JHU218i DB36874 13697   |           |
|                            | JHU217i DB36868 13698   |           |
| UNIQUE IDENTIFIER:         | NA  |           |
| PRODUCT REGISTRATION:      | Other: Human iPS cells  |           |

| TEST RESULTS: | # Tested | # Positives<br>(Growth) | - Control   |
|---------------|----------|-------------------------|-------------|
|               | 20       | 0                       | 3 Negatives |

**TEST SUMMARY:** 

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

# Native Product Sterility Report



**REFERENCE:** METHOD VALIDATION / PD #: **TEST METHODOLOGY:** 

Processed according to LAB-003: Sterility Test Procedure 000053 **USP** - Direct Transfer

COMMENTS:

Sample #18050738

REVIEWED BY



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 Assay Report

PCR-based assay performed by WiCell WiCell 04Nov20

| Sample Name                      |                    | Comments/Suggestions  |
|----------------------------------|--------------------|---|
| INC149 02Nov20AP (83598)         | Result<br>Negative | Band was not seen at 270bp, indicating the absence of mycoplasma. |
| INC123 02Nov20KR 1 of 2 (83599)  | Negative           | Band was not seen at 270bp, indicating the absence of mycoplasma. |
| INC123 02Nov20KR 2 of 2 (83600)  | Negative           | Band was not seen at 270bp, indicating the absence of mycoplasma. |
| INC169 02Nov20MMM 1 of 2 (83601) | Negative           | Band was not seen at 270bp, indicating the absence of mycoplasma. |
| INC169 02Nov20MMM 2 of 2 (83602) | Negative           | Band was not seen at 270bp, indicating the absence of mycoplasma. |
| JHU105i-DB36241 (83622)          | Negative           | Band was not seen at 270bp, indicating the absence of mycoplasma. |
| JHU004i-2-DB40945 (83623)        | Negative           | Band was not seen at 270bp, indicating the absence of mycoplasma. |
| JHU036i-DB40981 (83624)          | Negative           | Band was not seen at 270bp, indicating the absence of mycoplasma. |
| JHU102i-DB41279 (83625)          | Negative           | Band was not seen at 270bp, indicating the absence of mycoplasma. |
| JHU148i-DB36280 (83626)          | Negative           | Band was not seen at 270bp, indicating the absence of mycoplasma. |
| JHU173i-DB36380 (83627)          | Negative           | Band was not seen at 270bp, indicating the absence of mycoplasma. |
| JHU214i-DB36851 (83628)          | Negative           | Band was not seen at 270bp, indicating the absence of mycoplasma. |
| JHU234i-DB37041 (83629)          | Negative           | Band was not seen at 270bp, indicating the absence of mycoplasma. |
| JHU250i-DB36904 (83630)          | Negative           | Band was not seen at 270bp, indicating the absence of mycoplasma. |
| Positive (+) Control             | Positive           |   |
| Negative (-) Control             | Negative           |   |

Reported by: Senior Cell Culture Specialist Reviewed by: Assistant Cell Culture Specialist

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A gel image is available upon request.