# Thaw and Culture Details

| | |
|---|---|
| Cell Line Name | UCSD163i-95-1 |
| WiCell Lot Number | WB58969 |
| Provider | University of California, San Diego – Dr. Kelly Frazer |
| Banked By | WiCell |
| Thaw and Culture Recommendations | WiCell recommends thawing 1 vial into 3 wells of a 6 well plate. |
| Culture Platform | Feeder Independent |
| | Medium: mTeSR™1 |
| | Matrix: Matrigel® |
| Protocol | WiCell Feeder Independent mTeSR™1 Protocol |
| Passage Number | p18<br>These cells were cultured for 17 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 Vialed | 05-February-2017 |
| Vial Label | UCSD163i-95-1<br>p18<br>WB58969 |
| 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 | See Report |
| | *Results:* 46,X,idic(X)(q26)[5]/46,XX[15]<br>*Interpretation:* This is an abnormal karyotype showing formation of an isodicentric X chromosome in five of 20 metaphases analyzed. This results in three copies of the majority of the X chromosome and monosomy for the sequence distal to Xq26 in this clone. Gain of an X chromosome is a recurrent acquired abnormality 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.

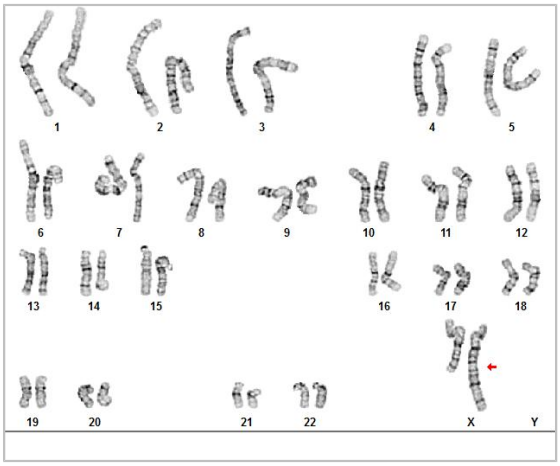
- Illumina® HumanCoreExome BeadChip Array
- RNA-Seq
- Flow Cytometry (SSEA-4, Tra 1-81)
- Infinium® Expanded Multi-Ethnic Genotyping Array (MEGA$^{EX}$)

| Approval Date | Quality Assurance Approval |
|---|---|
| 18-February-2017 | 5/3/2018<br>X JKG<br>JKG<br>Quality Assurance<br>Signed by: Gay, Jenna |

# Chromosome Analysis Report: 071333

**Date Reported:** Wednesday, April 18, 2018
**Cell Line:** UCSD163i-95-1-WB58969 13642
**Passage#:** 18
**Date of Sample:** 4/12/2018
**Specimen:** Human IPS
**Results:** 46,X,idic(X)(q26)[5]/46,XX[15]

**Cell Line Gender:** Female
**Reason for Testing:** Lot release testing
**Investigator:** [redacted], WiCell




**Cell:** 50
**Slide:** G03
**Slide Type:** Karyotype

**Total Counted:** 20
**Total Analyzed:** 8
**Total Karyogrammed:** 4
**Band Resolution:** 450 - 650

**Interpretation:**

***This is an abnormal karyotype showing formation of an isodicentric X chromosome in five of 20 metaphases analyzed. This results in three copies of the majority of the X chromosome and monosomy for the sequence distal to Xq26 in this clone. Gain of an X chromosome is a recurrent acquired abnormality 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 resu lts 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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TRIPath
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
(888) 204-1782

**Sample Report:**
13642-STR
**Sample Name on Tube:** 13642-STR
94.7ng/µL, (A260/280=1.90)
**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 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 13642-STR cells submitted by WiCell QA dated and received on 04/16/18, this sample (Label on Tube: 13642-STR) defines the STR profile of the human stem cell line UCSD163i-95-1 comprising 25 allelic polymorphisms across the 15 STR loci analyzed.**

**Interpretation:** **No STR polymorphisms other than those corresponding to the human UCSD163i-95-1 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 13642-STR sample submitted corresponds to the UCSD163i-95-1 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%.**

X *RMB* **Digitally Signed on 04/30/18**

[redacted], *BA*
*TRIP Laboratory, Molecular*

X *WMR* **Digitally Signed on 04/30/18**

[redacted], *PhD, Director / Co-Director*
*UWHC Molecular Diagnostics Laboratory / UWSMPH TRIP Laboratory*

# Native Product Sterility Report

STERIS

| | |
|---|---|
| SAMPLE #: | 18010216 |
| DATE RECEIVED: | 04-Jan-18 |
| TEST INITIATED: | 08-Jan-18 |
| TEST COMPLETED: | 22-Jan-18 |

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

SAMPLE NAME / DESCRIPTION:
UCSD140i-37-1 WB59010 13213
UCSD163i-95-1 WB58969 13214
UCSD172i-101-1 WB58971 13215
UCSD179i-27-1 WB58928 13216
UCSD212i-32-2 WB58930 13217
UCSD213i-14-1 WB58781 13218
UCSD214i-14-2 WB58929 13219
UCSD219i-117-1 WB59167 13220
UCSD200i-4-1 WB66717 13221
WISC012i-SCA WB66718 13222

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 Mensad

DATE 23JAN18

# Mycoplasma Detection Assay Report

Testing Performed by WiCell

Lot Release Testing

April 12, 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 | UCSD163i-95-1-WB58969 13642 | 426 | 423 | 424.5 | 100 | 114 | 107 | 0.25 | Negative | |
| 2 | Positive (+) Control | 650 | 649 | 649.5 | 28984 | 29283 | 29134 | 44.86 | Positive | |
| 3 | Negative (-) Control | 990 | 972 | 981 | 114 | 103 | 108.5 | 0.11 | Negative | |