

Thaw and Culture Details

| Cell Line Name | JHU152i | | | | | | |
|----------------------------------|---|--|--|--|--|--|--|
| WiCell Lot Number | DB36333 | | | | | | |
| Provider | Johns Hopkins University – Laboratory of Dr. Lewis Becker | | | | | | |
| Banked By | Johns Hopkins University – Laboratory of Dr. Lewis Becker | | | | | | |
| Thaw and Culture Recommendations | WiCell recommends thawing 1 vial into 4 wells of a 6 well plate. WiCell recommends thawing using ROCK Inhibitor for best results | | | | | | |
| Culture Platform | Feeder Independent | | | | | | |
| | Medium: E8 | | | | | | |
| | Matrix: Vitronectin | | | | | | |
| Protocol | WiCell Feeder Independent E8 Medium Protocol | | | | | | |
| Passage Number | p6 These cells were cultured for 6 passages post reprogramming prior to freeze. Add +1 to the passage number to best represent the overall passage number of the cells at thaw. | | | | | | |
| Date Vialed | 23-February-2016 | | | | | | |
| Vial Label | P152 P6 1x10^6 2/23/16 | | | | | | |
| 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 | | | | |
|------------------------|--|----------------------|---------------------------------------|------------|--|--|--|--|
| | WiCell | WiCell SOP-CH-003 Ex | | See Report | | | | |
| | Results: 47,XX,+8[2]/46,XX[27] Nonclonal findings: 47,XX,+10 | | | | | | | |
| | | | An extra copy of chromosome 8 (tris | | | | | |
| Karyotype by G-banding | | | mosomal aberration is recurrently a | | | | | |
| | | | alities were detected at the stated b | | | | | |
| | resolution. There is a nonclonal finding, listed above. Nonclonal findings may result from technical | | | | | | | |
| | artifact, but may be due to a developing clonal abnormality or to low-level mosaicism. | | | | | | | |
| Post-Thaw Viable Cell | WiCell | SOP-CH-305 | Recoverable attachment after | Pass | | | | |
| Recovery | VVIOCII | 001-011-000 | passage | 1 433 | | | | |
| Identity by STR | UW Translational | PowerPlex 16 HS | | | | | | |
| | Research Initiatives in | System by | Defines profile | Pass | | | | |
| | Pathology Laboratory | | | | | | | |
| 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.

- Embryoid bodies
- Infinium® Expanded Multi-Ethnic Genotyping Array (MEGAEX)

| Approval Date | Quality Assurance Approval | | |
|---------------|---|--|--|
| 14-July-2016 | 2/14/2019 X JKG NG Quality Assurance Signed by Gay, Xena | | |



Chromosome Analysis Report: 074677

Date Reported: Wednesday, January 23,

2019

Cell Line: JHU152i-DB36333 14249

Passage#: 7

Date of Sample: 1/16/2019 Specimen: Human IPS

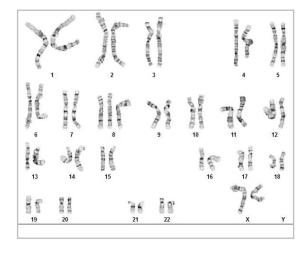
Results: 47,XX,+8[2]/46,XX[27]

Nonclonal findings: 47,XX,+10

Cell Line Sex: Female

Reason for Testing: Lot Release Testing

Investigator: WiCell



Cell: 48 Slide: G02

Slide Type: Karyotype

Total Counted: 30
Total Analyzed: 10
Total Karyogrammed: 6
Band Resolution: 425 - 475

Interpretation:

This is an abnormal karyotype. An extra copy of chromosome 8 (trisomy 8) is present in two of thirty cells examined. This chromosomal aberration is recurrently acquired in cultures of this cell type. No other clonal abnormalities were detected at the stated band level of resolution.

There is a nonclonal finding, listed above. Nonclonal findings may result from technical artifact, but may be due to a developing clonal abnormality or to low-level mosaicism.

| Completed by: | , CG(ASCP) |
|------------------------------|--------------|
| 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.



TRIP Laboratory (Molecular)

Short Tandem Repeat Analysis HISTOLOGY - IHC - MOLECULAR - IMAGING

Your Lab Partner

characterization@wicell.org

(608) 316-4145

Sample Report: 14249-STR

(608) 265-9168

Sample Name on Tube: 14249-STR

https://research.pathology.wisc.edu/trip/

Department of Pathology and Laboratory Medicine

 $70.7 \text{ ng/}\mu\text{L}$, (A260/280=1.88)

Sample Type: Cells

Cell Count: ~2 million cells

Requestor:

WiCell Research Institute Quality Assurance Department **Receive Date:** 01/22/19 **Report Sent:** 01/29/19 **Assav Date:** 01/24/19

File Name: STR 190125 wmr

Report Date: 01/28/19

| 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 | | | |
| TPOX | 6-13 | information has | | | |
| D8S1179 | 7-18 | been redacted to | | | |
| vWA | 10-22 | protect donor | | | |
| Amelogenin | X,Y | confidentiality. If more information | | | |
| Penta_D | D 2.2, 3.2, 5, 7-17 | | | | |
| CSF1PO | 6-15 | is required, please, contact | | | |
| D16S539 | 5, 8-15 | WiCell's Technical | | | |
| D7S820 | 6-14 | Support. | | | |
| D13S317 | 7-15 | <u> </u> | | | |
| D5S818 | D5S818 7-16 | | | | |
| Penta_E | Penta_E 5-24 | | | | |
| D18S51 | D18S51 8-10, 10.2, 11-13, 13.2, 14-27 | | | | |
| D21S11 | 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 14249-STR cells submitted by WiCell QA dated and received on 01/29/18, this sample (Label on Tube: 14249-STR) defines the STR profile of the human stem cell line JHU152i comprising 28 allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: No STR polymorphisms other than those corresponding to the human JHU152i 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 14249-STR sample submitted corresponds to the JHU152i 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 $\sim 2-5\%$.

X WMR \mathbf{X} RMB Digitally Signed on 01/29/19 Digitally Signed on 01/29/19 , PhD, Director / Co-Director TRIP Laboratory, Molecular UWHC Molecular Diagnostics Laboratory / UWSMPH TRIP Laboratory

Native Product Sterility Report



SAMPLE #:

19011133

DATE RECEIVED:

17-Jan-19

504 S Rosa Road, Rm 101

TEST INITIATED:

22-Jan-19

Madison, WI 53719

WiCell

TEST COMPLETED:

05-Feb-19

SAMPLE NAME / DESCRIPTION:

STAN039i-119-1 WB66980 14235

JHU152i DB36333 14236 JHU176i DB36383 14237 JHU183i DB36760 14238 JHU238i DB37055 14239 JHU006i-1 DB40948 14240

STAN065i-167-1 DB31085 14241 STAN066i-167-2 DB31097 14242 STAN069i-169-1 DB31068 14243 STAN070i-169-2 DB31078 14244

UNIQUE IDENTIFIER:

NA

TEST RESULTS:

| | # Positives | |
|----------|-------------|-------------|
| # Tested | (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

PD #:

000053

TEST METHODOLOGY:

USP - Direct Transfer

COMMENTS:

NA

REVIEWED BY

DATE OSFEBIT

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.



Mycoplasma Detection Assay Report Testing Performed by WiCell

Testing Performed by WiCell Lot Release Testing January 17, 2019

FORM SOP-QU-004.01 Version G Edition 02 Reported by: AP Reviewed by: JB Berthold Flash n' Glow 539

| | | Read | ing A | A Re | | ling B | В | Ratio | | |
|---|-----------------------|------|-------|------|------|--------|-------|-------|----------|----------------------|
| # | Sample Name | RLU1 | RLU2 | Ave | RLU1 | RLU2 | Ave | B/A | Result | Comments/Suggestions |
| 1 | JHU152i-DB36333 14249 | 64 | 62 | 63 | 22 | 21 | 21.5 | 0.34 | Negative | |
| 2 | Positive (+) Control | 73 | 82 | 77.5 | 615 | 624 | 619.5 | 7.99 | Positive | |
| 3 | Negative (-) Control | 267 | 265 | 266 | 30 | 27 | 28.5 | 0.11 | Negative | |

