



Thaw and Culture Details

| | |
|----------------------------------|--|
| Cell Line Name | STAN206i-459C1 |
| WiCell Lot Number | DB35958 |
| Provider | Stanford University – Laboratory of Dr. Thomas Quettermous |
| Banked By | Icahn School of Medicine at Mount Sinai Stem Cell Core |
| 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. |
| Culture Platform | Feeder Independent |
| | Medium: mTeSR1™ |
| | Matrix: Matrigel® |
| Protocol | WiCell Feeder Independent mTeSR1™ Protocol |
| Passage Number | p12 These cells were cultured for 12 passages after colony picking prior to freeze. Add +1 to the passage number to best represent the overall passage number of the cells at thaw. |
| Date Vialied | 18-February-2016 |
| Vial Label | ISMMS 459i C1P12 AP 021816 |
| 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. |

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 |
| 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

| Test Description | Method | Result |
|------------------|---------------------|----------|
| Mycoplasma | Lonza MycoAlert kit | Negative |

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.

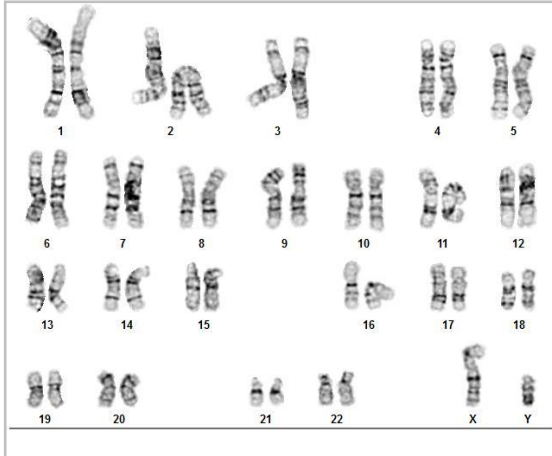
- RNA-Seq
- Whole Genome Sequencing
- Infinium® Expanded Multi-Ethnic Genotyping Array (MEGA^{EX})



| Approval Date | Quality Assurance Approval |
|-----------------|---|
| 31-October-2016 | <p style="text-align: right;">1/4/2019</p> <p>X JKG</p> <p>JKG Quality Assurance Signed by Gay, Jenna</p> |

Date Reported: Monday, December 17, 2018
Cell Line: STAN206i-459C1-DB35958 14167
Passage#: 14
Date of Sample: 12/11/2018
Specimen: Human IPS
Results: 46,XY

Cell Line Sex: Male
Reason for Testing: lot release testing
Investigator: [REDACTED], WiCell



Cell: 18
Slide: G01
Slide Type: Karyotype

Total Counted: 20
Total Analyzed: 8
Total Karyogrammed: 4
Band Resolution: 425 - 500

Interpretation:

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

Completed by: [REDACTED], CG(ASCP)
Reviewed and Interpreted by: [REDACTED] 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.



HISTOLOGY - IHC - MOLECULAR - IMAGING

Department of Pathology and Laboratory Medicine
TRIP Laboratory (Molecular)
<https://research.pathology.wisc.edu/trip/>
(608) 265-9168

Short Tandem Repeat Analysis



Your Lab Partner

characterization@wicell.org
(608) 316-4145

Sample Report:

14167-STR

Sample Name on Tube: 14167-STR

79.7 ng/μL, (A260/280=1.85)

Sample Type: Cells

Cell Count: ~2 million cells

Requestor:

WiCell Research Institute

Quality Assurance Department

Receive Date: 12/17/18

Report Sent: 12/21/18

Assay Date: 12/18/18

File Name: STR 181218 wmr

Report Date: 12/21/18

| 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 14167-STR cells submitted by WiCell QA dated and received on 12/17/18, this sample (Label on Tube: 14167-STR) defines the STR profile of the human stem cell line STAN206i-459C1 comprising 27 allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: No STR polymorphisms other than those corresponding to the human STAN206i-459C1 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 14167-STR sample submitted corresponds to the STAN206i-459C1 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 12/21/18

X *WMR*

Digitally Signed on 12/21/18

BA
TRIP Laboratory, Molecular

, 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> 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 <https://www.wicell.org/media.acux/ca76d97c-862a-43f3-b02a-ab2d1e619100>. 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.

Native Product Sterility Report



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

SAMPLE #: 18111110
DATE RECEIVED: 15-Nov-18
TEST INITIATED: 26-Nov-18
TEST COMPLETED: 10-Dec-18

SAMPLE NAME / DESCRIPTION: LUEL8357i-3 WB66939 14103
LUEL8679i-4 WB66940 14104
STAN100i-108C4 DB44605 14105
STAN099i-108C2 DB44602 14106
STAN207i-459C2 DB35961 14107
STAN206i-459C1 DB35958 14108
STAN216i-496C1 DB35535 14109
LUEL7159i-7 WB66914 14110
EFNB2-tdTomato/EPHB4-EGFP DB66613 14116
JHU012i-2 DB36196 14117

UNIQUE IDENTIFIER: NA
PRODUCT REGISTRATION: Other: Human iPS cells

TEST RESULTS:

| # Tested | # Positives (Growth) | - Control |
|----------|----------------------|-------------|
| 10 | 1 | 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: Sample labeled LUEL7159i-7 WB66914 14110 is positive in TSB and FTG.

REVIEWED BY

DATE

20 DEC 18

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 29, 2018

FORM SOP-QU-004.01
Version G Edition 02
Reported by: AP
Reviewed by: JB
BD Monolight 180

| # | Sample Name | Reading A | | A Ave | Reading B | | B Ave | Ratio B/A | Result | Comments/Suggestions |
|---|------------------------------|-----------|------|-------|-----------|-------|-------|-----------|----------|----------------------|
| | | RLU1 | RLU2 | | RLU1 | RLU2 | | | | |
| 1 | STAN206i-459C1-DB35958 14162 | 225 | 221 | 223 | 83 | 83 | 83 | 0.37 | Negative | |
| 2 | Positive (+) Control | 768 | 796 | 782 | 33850 | 34090 | 33970 | 43.44 | Positive | |
| 3 | Negative (-) Control | 825 | 849 | 837 | 92 | 88 | 90 | 0.11 | Negative | |

