

Thaw and Culture Details

| Cell Line Name | Al03e-DCXYFP | | | | | | |
|---|---|--|--|--|--|--|--|
| WiCell Lot Number | DB66690 | | | | | | |
| Provider | Allen Institute – Dr. Boaz Levi | | | | | | |
| Banked By | Allen Institute – Dr. Boaz Levi | | | | | | |
| Thaw and Culture Recommendations | WiCell recommends thawing 1 vial into 4 well of a 6 well plate. | | | | | | |
| Culture Platform | Feeder Independent | | | | | | |
| | Medium: mTeSR™1 | | | | | | |
| Matrix: Matrigel® | | | | | | | |
| Protocol WiCell Feeder Independent mTeSR™1 Protocol | | | | | | | |
| Passage Number | p62 These cells were cultured for 61 passages prior to freeze. Cells were modified at passage 41. The provider adds +1 to the passage number to best represent the overall passage number of the cells at thaw. | | | | | | |
| Date Vialed | 09-June-2014 | | | | | | |
| Vial Label | DCX-C #1 H1 p62 June 9, 2014 | | | | | | |
| 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 | SOP-CH-003 Expected karyotype | | | | | |
| 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 | Consistent with STR profile of deposited cell line | Pass | | | | |
| Sterility | Steris | ST/07 | Negative | Pass | | | | |
| Mycoplasma | WiCell | SOP-QU-004 | Negative | Pass | | | | |

Testing Reported by Provider

The provider has stated the following testing and results were performed for this cell line. A link to the relevant publication is provided on the cell line specific web page on the WiCell website.

| Test Description | Result |
|--------------------------------|------------------|
| Karyotype by G-banding | Normal karyotype |
| Mycoplasma | Negative |
| Sterility | Negative |
| Expression of reporter protein | Pass |



| Approval Date | Quality Assurance Approval | | |
|-----------------|---|--|--|
| 25-January-2018 | 5/27/0000 X HEB HBB Unally Assurance Signed by: Bruner, Haley | | |



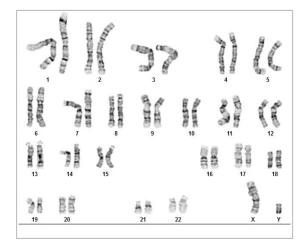
Chromosome Analysis Report: 070464

Date Reported: Thursday, February 22, 2018 Cell Line: Al03e-DCXYFP-DB66690 13381

Passage#: 62

Date of Sample: 2/13/2018 Specimen: Human ES

Results: 46,XY



Cell Line Gender: Male

Reason for Testing: lot release testing

Investigator: , WiCell CDM

Cell: 19

Slide: G06

Slide Type: Karyotype

Total Counted: 20
Total Analyzed: 8

Total Karyogrammed: 4
Band Resolution: 450 - 550

QC Review By: __

Interpretation:

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

Sent By:____

| Completed by: | , CG(ASCP) |
|------------------------------|------------|
| Reviewed and Interpreted by: | PhD, FACMG |

A signed copy of this report is available upon request.

| Limitations: | This assay allows for | microscopic visualiz | ation of numerical and s | tructural chromosome | abnormalities. T | he size of structural a | bnormality that | can be detected |
|--------------|-----------------------|----------------------|--------------------------|----------------------|------------------|-------------------------|-----------------|-----------------|
| | | | htained from this anasim | | | | | |

Sent To:

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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Short Tandem Repeat

Analysis

WiCell® info@wicell.org (888) 204-1782

HISTOLOGY - IHC - MOLECULAR - IMAGING

Department of Pathology and Laboratory Medicine TRIP Laboratory (Molecular)

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

Sample Report:

13381-STR

Sample Name on Tube: 13381-STR

 $88.0 \text{ ng/}\mu\text{L}$, (A260/280=1.92)

Sample Type: Cells

Cell Count: ~2 million cells

Requestor:

WiCell Research Institute Quality Department Sample Date: N/A Receive Date: 02/26/18 Assay Date: 02/27/18

File Name: STR 180228 wmr

Report Date: 03/05/18

| 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 | 20,24 | | | | |
| TPOX | TPOX 6-13 | | | | | |
| D8S1179 | 7-18 | 12,13 | | | | |
| vWA | 10-22 | 15,17 | | | | |
| Amelogenin | X,Y | X,Y | | | | |
| Penta_D | 2.2, 3.2, 5, 7-17 | 10,13 | | | | |
| CSF1PO | 6-15 | 12,13 | | | | |
| D16S539 | 5, 8-15 | 9,13 | | | | |
| D7S820 | 6-14 | 8,12 | | | | |
| D13S317 | 7-15 | 8,11 | | | | |
| D5S818 | 7-16 | 9,11 | | | | |
| Penta_E | 5-24 | 10,12 | | | | |
| D18S51 | | | | | | |
| 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 | 9.3,9.3 | | | | |
| D3S1358 | 12-20 | 15,15 | | | | |

<u>Results:</u> Based on the 13381-STR cells submitted by WiCell QA dated and received on 02/26/18, this sample (Label on Tube: 13381-STR) exactly matches the STR profile of the human stem cell line WA01 comprising 28 allelic polymorphisms across the 15 STR loci analyzed.

<u>Interpretation:</u> No STR polymorphisms other than those corresponding to the human WA01 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 13381-STR sample submitted corresponds to the WA01 stem cell line and was not contaminated with any other human stem cells or a significant amount of mouse feeder layer cells.

<u>Sensitivity</u>: 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 03/06/18

X WMR Digitally Signed on 03/06/18

BA
TRIP Laboratory, Molecular

TRIP Laboratory, Molecular

UWHC Molecular Diagnostics Laboratory / UWSMPH TRIP Laboratory

Native Product Sterility Report



SAMPLE #:

18021403

DATE RECEIVED:

22-Feb-18

TEST INITIATED:

23-Feb-18

TEST COMPLETED:

09-Mar-18

SAMPLE NAME / DESCRIPTION:

WiCell

504 S Rosa Rd, Rm 101

Madison, WI 53719

AI03e-DCXYFP DB66690 13456
AI06e-SOX2YFP DB66691 13457
AI07e-Timothy DB66692 13458
AI08e-PAX6YFP DB66693 13459
AI09e-KCTD13a DB66694 13460
AI10e-KCTD13b DB66695 13461
AI11e-OTX2YFP DB66696 13462
AI12e-HOPX-CIT+/- DB66697 13463
AI13e-HOPX-CIT+/+ DB66698 13464
CREM022i-SS32-1 WB66732 13466
iPS(IMR90)-1 WB66731 13467
STAN004i-147-1 DB31065 13468
STAN005i-147-2 DB31088 13469
STAN024i-29-1 DB30891 13470

WC034i-SOD1-D90A WB66734 13472 WC035i-SOD1-D90D WB66733 13473

STAN025i-29-2 DB30897 13471

WISC015i-SC7 WB66735 13474 WC008i-C603-4 WB66741 13475 WC034i-SOD1-D90A WB66740 13484

UNIQUE IDENTIFIER:

NA

PRODUCT REGISTRATION:

Other: Human iPS cells

TEST RESULTS:

| # Tested | # Positives (Growth) | - Control |
|----------|-------------------------|-------------|
| 20 | 0 | 3 Negatives |

TEST SUMMARY:

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

REFERENCE:

Processed according to LAB-003: Sterility Test Procedure

METHOD VALIDATION / PD #:

000053

STERIS Laboratories, Inc. 9303 West Broadway Ave Brooklyn Park, MN 55445

LAB-003 rev 30 Form 5 Effective: 2017-08-29 Page 1 of 2

Native Product Sterility Report



USP - Direct Transfer

COMMENTS:

NA

18021403

REVIEWED BY Deward

DATE 22 MARIS

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

Testing Performed by WiCell Lot Release Testing February 15, 2018

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

| | | Read | ing A | A A Reading B | | В | Ratio | | | |
|---|----------------------------|------|-------|---------------|-------|-------|-------|-------|----------|----------------------|
| # | Sample Name | RLU1 | RLU2 | Ave | RLU1 | RLU2 | Ave | B/A | Result | Comments/Suggestions |
| 1 | AI03e-DCXYFP-DB66690 13381 | 276 | 251 | 263.5 | 92 | 86 | 89 | 0.34 | Negative | |
| 2 | Positive (+) Control | 360 | 381 | 370.5 | 14525 | 14630 | 14578 | 39.35 | Positive | |
| 3 | Negative (-) Control | 611 | 629 | 620 | 69 | 63 | 66 | 0.11 | Negative | |

