# Thaw and Culture Details

| | |
|---|---|
| Cell Line Name | PENN029i-752-3 |
| WiCell Lot Number | DB36392 |
| Provider | University of Pennsylvania – Dr. Daniel Rader |
| Banked By | Penn Institute for Regenerative Medicine iPS Core Facility |
| Thaw and Culture Recommendations | WiCell recommends thawing 1 vial into 1 wells of a 6 well plate. WiCell recommends thawing using ROCK Inhibitor for best results. |
| Culture Platform | Feeder Dependent |
| | Medium: hESC Medium (KOSR) |
| | Matrix: MEF |
| Protocol | WiCell Feeder Dependent Protocol |
| Passage Number | p12<br>These cells were cultured for 12 passages prior to freeze and post colony picking. Therefore, plated cells at thaw should be labeled passage 13. |
| Date Vialed | 19-May-2015 |
| Vial Label | iPS-752<br>Sev3<br>P12<br>05-19-15 JS |
| 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 | Pass |
| | *Results:* 46,XY Nonclonal finding: 46,XY,t(4;8)(q34;q12)<br>*Interpretation:* This is a normal karyotype. No clonal abnormalities were detected at the stated band level of resolution. There is one nonclonal finding, listed above. Nonclonal findings likely result from technical artifact, but may be due to a developing clonal abnormality or to low-level mosaicism. | | | |
| 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.

- SNP microarray
- Flow Cytometry (Tra1-60 and SSEA-4)
- Differentiation into hepatocytes
- Infinium® Expanded Multi-Ethnic Genotyping Array (MEGA$^{EX}$)

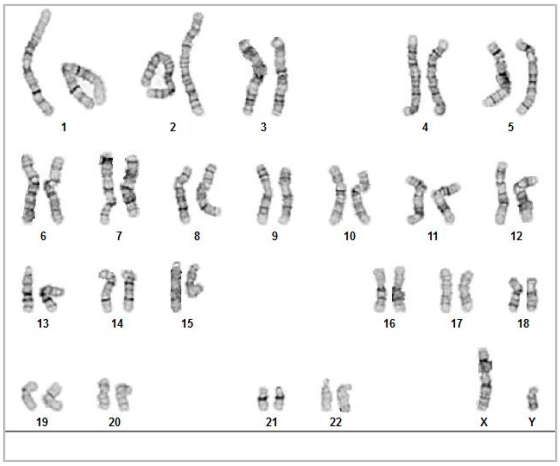
| Approval Date | Quality Assurance Approval |
|---|---|
| 23-June-2016 | 4/21/2018<br>X JKG<br>JKG<br>Quality Assurance<br>Signed by: Gay, Jenna |

# Chromosome Analysis Report: 070876

**Date Reported:** Monday, March 19, 2018
**Cell Line:** PENN029i-752-3-DB36392 13499
**Passage#:** 14
**Date of Sample:** 3/13/2018
**Specimen:** Human IPS
**Results:** 46,XY

**Cell Line Gender:** Male
**Reason for Testing:** lot release testing
**Investigator:** [redacted] WiCell

**Nonclonal finding: 46,XY,t(4;8)(q34;q12)**




**Cell:** 19
**Slide:** G02
**Slide Type:** Karyotype

**Total Counted:** 20
**Total Analyzed:** 8
**Total Karyogrammed:** 4
**Band Resolution:** 400 - 500

**Interpretation:**

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

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

**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".*

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:**
13302-STR
**Sample Name on Tube:** 13302-STR
56.3 ng/µL, (A260/280=2.77)
**Sample Type:** Cells
**Cell Count:** ~2 million cells

**Requestor:**
WiCell Research Institute
Quality Department

**Sample Date:** N/A
**Receive Date:** 02/12/18
**Assay Date:** 02/13/18
**File Name:** STR 180214 wmr
**Report Date:** 02/16/18

| 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 13302-STR cells submitted by WiCell QA dated and received on 02/12/18, this sample (Label on Tube: 13302-STR) defines the STR profile of the human stem cell line PENN029i-752-3 comprising 26 allelic polymorphisms across the 15 STR loci analyzed.**

**Interpretation:** **No STR polymorphisms other than those corresponding to the human PENN029i-752-3 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 13302-STR sample submitted corresponds to the PENN029i-752-3 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 02/16/18**

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

X *WMR* **Digitally Signed on 02/16/18**

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

# Native Product Sterility Report

STERIS

| | |
|---|---|
| SAMPLE #: | 18020291 |
| DATE RECEIVED: | 06-Feb-18 |
| TEST INITIATED: | 07-Feb-18 |
| TEST COMPLETED: | 21-Feb-18 |

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

SAMPLE NAME / DESCRIPTION: CREM015i-SS16-1 WB66723 13311, CREM016i-SS18-1 WB66712 13312, CREM019i-SS25-1 WB66728 13313, CREM021i-SS29-1 WB66729 13314, H9-SOX2-GFP WB66727 13315, WC005i-FX11-7 WB20338 13316, WC009i-FX08-01 WB17924 13317, PENN015i-668-5 DB36410 13318, PENN029i-752-3 DB36392 13319, PENN009i-57-52 DB35131 13320, PENN034i-322-1 DB34729 13321, PENN077i-521-1 DB36597 13322, PENN125i-233-4 DB35073 13323, PENN136i-262-1 DB35081 13324, UCSD048i-52-1 WB66722 13325, UCSD208i-111-1 WB66730 13326, UCSD133i-79-1 WB61228 13327, UCSD152i-11-3 WB61663 13328, UCSD168i-22-1 WB61577 13329, UCSD170i-22-3 WB60774 13330, UCSD175i-18-3 WB60837 13331, UCSD066i-67-1 WB60392 13332, UCSD099i-35-2 WB65030 13334, UCSD117i-72-1 WB60039 13335, UCSD119i-38-2 WB60256 13336, UCSD125i-7-2 WB59219 13337, UCSD128i-7-5 WB60297 13338, UCSD151i-11-2 WB59218 13339, UCSD158i-12-4 WB60020 13340, UCSD088i-6-5 WB53942 13341, UCSD147i-10-2 WB54174 13342, UCSD167i-99-1 WB54407 13343, UCSD198i-23-1 WB54163 13344, UCSD098i-35-1 WB55340 13345, UCSD100i-36-1 WB55460 13346, UCSD129i-75-1 WB54795 13347, UCSD136i-82-1 WB54902 13348, UCSD139i-85-1 WB55345 13349, UCSD173i-18-1 WB54899 13350, UCSD187i-104-1 WB55339 13351, UCSD206i-31-1 WB54794 13352, UCSD217i-115-1 WB55069 13353, UCSD218i-116-1 WB55459 13354, UCSD094i-25-1 WB55177 13355, UCSD095i-25-2 WB57580 13356, UCSD097i-34-2 WB57100 13357, UCSD113i-68-1 WB57056 13358, UCSD115i-70-1 WB55081 13359, UCSD184i-8-1 WB55338 13360, UCSD188i-105-1 WB55082 13361

UNIQUE IDENTIFIER: NA

PRODUCT REGISTRATION: Other: Human iPS cells

TEST RESULTS:

| # Tested | # Positives (Growth) | - Control |
|---|---|---|
| 50 | 0 | 3 Negative |

TEST SUMMARY:

| # Samples | Media Type | Volume (mL) | Incubation Temperature (° C) | Incubation Duration (Days) |
|---|---|---|---|---|
| 50 | TSB | 40 | 20-25 | 14 |
| 50 | FTG | 40 | 30-35 | 14 |

REFERENCE: Processed according to LAB-003: Sterility Test Procedure

METHOD VALIDATION / PD #: 000053

TEST METHODOLOGY: USP - Direct Transfer

# Native Product Sterility Report

STERIS

COMMENTS: Sample # 18020291

REVIEWED BY _____ DATE 22FEB18

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

February 1, 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 | PENN029i-752-3-DB36392 13302 | 399 | 394 | 396.5 | 134 | 130 | 132 | 0.33 | Negative | |
| 2 | Positive (+) Control | 428 | 443 | 435.5 | 14287 | 14372 | 14330 | 32.90 | Positive | |
| 3 | Negative (-) Control | 650 | 672 | 661 | 61 | 56 | 58.5 | 0.09 | Negative | |