Thaw and Culture Details

Cell Line Name	**GFAP-R416R**
WiCell Lot Number	**WB67485**
Provider	University of Wisconsin – Dr. Su-Chun Zhang
Banked By	WiCell
Thaw and Culture Recommendations	WiCell recommends thawing 1 vial into 3 wells of a 6 well plate using mTeSR™1 and Matrigel®
Protocol	WiCell Feeder Independent mTeSR™1 Protocol
Culture Platform Prior to Freeze	Feeder Independent
	Medium: mTeSR™1
	Matrix: Matrigel®
Passage Number	p22 These cells were cultured for 21 passages prior to freeze and post reprogramming. Cells were modified at passage 17. WiCell adds +1 to the passage number at freeze to best represent the overall passage number of the cells at thaw. Plated cells at thaw should be labeled passage 22.
Date Vialed	11-June-2020
Vial Label	GFAP-R416R p22 WB67485
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
	Results: 46,XY Nonclonal findings: 46,XY,del(3)(q26.2q27) ***Interpretation:*** This is a normal karyotype; no 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.			
Post-Thaw Viable Cell Recovery	WiCell	SOP-CH-305	≥ 15 Undifferentiated Colonies prior to passage, ≤ 30% Differentiation prior to passage, and recoverable attachment after passage	Pass
Identity by STR	UW Translational Research Initiatives in Pathology Laboratory	PowerPlex 16 HS System by Promega	Defines STR profile of deposited cell line	Pass
Sterility	Steris	ST/07	Negative	Pass
Mycoplasma	WiCell	SOP-CH-044	Negative	Pass

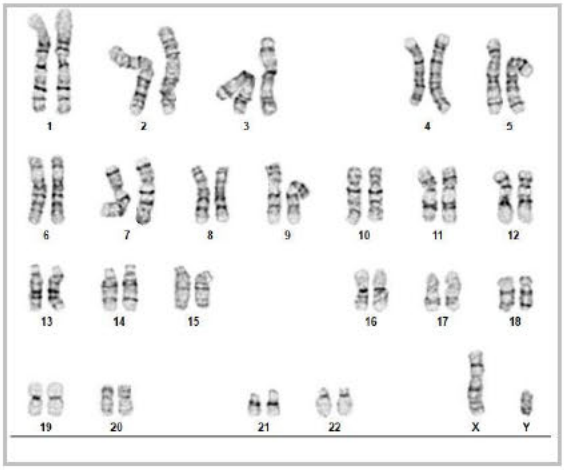
Approval Date	Quality Assurance Approval
30-July-2020	7/30/2020 X JKG JKG Quality Assurance Signed by: Gay, Jenna

Chromosome Analysis Report: 081716

Date Reported: Thursday, June 26, 2020
Cell Line: GFAP-R416R-WB67485
Passage#: 22
Date of Sample: 6/19/2020
Specimen: Human Modified iPSC
Results: 46,XY

Cell Line Sex: Male
Reason for Testing: LOT_RELEASE
Investigator: WiCell Stem Cell Bank, WiCell

Nonclonal findings: 46,XY,del(3)(q26.2q27)



Cell: 42
Slide: G02
Slide Type: Karyotype

Total Counted: 20
Total Analyzed: 8
Total Karyogrammed: 4
Band Resolution: 425 - 475

Interpretation:
This is a normal karyotype; no 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: [redacted] CG(ASCP)
Reviewed and Interpreted by: [redacted], Ph.D.

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".

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TRIP Laboratory (Molecular)
https://research.pathology.wisc.edu/trip-home/
(608) 265-9168

WiCell
Your Lab Partner
characterization@wicell.org
(608) 316-4145

Short Tandem Repeat Analysis

Requestor: WiCell Characterization

Receive Date: 06/22/20
Report Sent: 06/30/20, 07/15/20

Label on tube	STAN094i-081C2-WB67446 p.20 (81581)	STAN251i-637C1-WB67455 p.23 (81594)	CREM048i-BR3-1-WB67450 p.17 (81649)	STAN360i-465C2-WB67451 p.23 (81650)	GFAP-R416W-WB67486 p.18 (81714)	GFAP-R416R-WB67485 p.22 (81716)	MIN09i-33114.C-WB67492 p.17 (81717)
Label on Report							
conc (ng/µL)							
A260/280							
Assay Date							
File Name							
FGA							
TPOX							
D8S1179							
vWA							
Amelogenin							
Penta_D							
CSF1PO							
D16S539							
D7S820							
D13S317							
D5S818							
Penta_E							
D18S51							
D21S11							
TH01							
D3S1358							
Allelic Polymorphisms							
Matches*							
Comments							

[redacted]

Identifying information has been redacted to protect donor confidentiality. If more information is required, please, contact WiCell's Technical Support.

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Short Tandem Repeat Analysis

Label on tube	GFAP-R88R-WB67491 p.24 (81718)
Label on Report	Identifying information has been redacted to protect donor confidentiality. If more information is required, please, contact WiCell's Technical Support.
conc (ng/µL)	
A260/280	
Assay Date	
File Name	
FGA	
TPOX	
D8S1179	
vWA	
Amelogenin	
Penta_D	
CSF1PO	
D16S539	
D7S820	
D13S317	
D5S818	
Penta_E	
D18S51	
D21S11	
TH01	
D3S1358	
Allelic Polymorphisms	
Matches*	
Comments	

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Short Tandem Repeat Analysis

Results: Based on the cells submitted by WiCell Characterization Department dated and received on 06/22/20, these samples define the STR profiles of the human cell lines as indicated by name. The genotypic profiles comprise a range of 23-28 allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: 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. These results suggests that the cells submitted correspond to the cell lines as named and were not contaminated with any other human 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 cell lines is ~2-5%.

Acknowledge TRIP in your publications, posters & presentations. For details, see: https://research.pathology.wisc.edu/acknowledging-trip/

* ***Note:*** *The STR profile of the following sample is an exact match for the given sample/samples.*

X *RMB* **Digitally Signed on 07/15/20**

[redacted], *BA*

TRIP Laboratory, Molecular

X *WMR* **Digitally Signed on 07/15/20**

[redacted], *PhD, Director / Co-Director*

UWHC Molecular Diagnostics Laboratory / UWSMPH TRIP Laboratory

Native Product Sterility Report

STERIS

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

SAMPLE #:	20061484
DATE RECEIVED:	25-Jun-20
TEST INITIATED:	01-Jul-20
TEST COMPLETED:	15-Jul-20

SAMPLE NAME / DESCRIPTION: [redacted]

SCRP0307i-WB67453
STAN093i-081C1-WB67435
SCRP0402i-DB42018
GFAP-R416W-WB67486
GFAP-R416R-WB67485
GFAP-R88R-WB67491
MIN09i-33114.C-WB67492
CHB8-DB66974

UNIQUE IDENTIFIER: NA

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

Native Product Sterility Report

STERIS

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

PD #: 000053

TEST METHODOLOGY: USP - Direct Transfer

COMMENTS: NA

REVIEWED BY _____ DATE 16JUL2020

Mycoplasma Assay Report

PCR-based assay performed by WiCell

WiCell

24Jun20

FORM SOP-CH-048.01
Version C Edition 01

Sample Name	Result	Comments/Suggestions
GFAP-R88R-WB67491 (81653)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
GFAP-R416W-WB67486 (81654)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
MIN09i-33114.C-WB67492 (81655)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
GFAP-R416R-WB67485 (81656)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
Positive (+) Control	Positive	
Negative (-) Control	Negative	

Reported by: [redacted], **Assistant Cell Culture Specialist**
Reviewed by: [redacted]**i, Cell Culture Specialist**

A gel image is available upon request.