




Thaw and Culture Details

Cell Line Name	MIN21i-34363.B
WiCell Lot Number	WB20385
Provider	Massachusetts General Hospital
Banked By	WiCell
Thaw and Culture Recommendations	WiCell recommends thawing 1 vial into 3 wells of a 6 well plate.
Culture Platform	Feeder Independent
	Medium: mTeSR™1
	Matrix: Matrigel®
Protocol	WiCell Feeder Independent mTeSR™1 Protocol
Passage Number	p12 These cells were cultured for 11 passages prior to freeze. WiCell adds +1 to the passage number at freeze to best represent what the overall passage number of the cells at thaw. Plated cells at thaw should be labeled passage 12.
Date Vialied	19-June-2015
Vial Label	MIN21i-34363.B p12 WB20385
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.

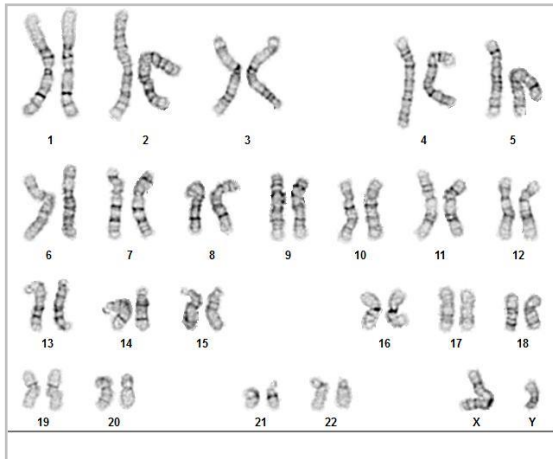
Testing Performed by WiCell

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	≥ 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-CH-044	Negative	Pass

Approval Date	Quality Assurance Approval
09-October-2015	<div style="text-align: right;">3/27/2019</div>  <small>JIC Quality Assurance Signed by: Gay, Jenna</small>

Date Reported: Wednesday, March 06, 2019
Cell Line: MIN21i-34363.B-WB20385 14318
Passage#: 12
Date of Sample: 2/25/2019
Specimen: Human IPS
Results: 46,XY

Cell Line Sex: Male
Reason for Testing: Lot Release Testing
Investigator: [REDACTED] WiCell



Cell: 5
Slide: G01
Slide Type: Karyotype

Total Counted: 20
Total Analyzed: 8
Total Karyogrammed: 4
Band Resolution: 450 - 525

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.

Short Tandem Repeat Analysis

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

characterization@wicell.org
(608) 316-4145

Sample Report:

14318-STR

Sample Name on Tube: 14318-STR

70.0 ng/μL, (A260/280=1.88)

Sample Type: Cells

Cell Count: ~2 million cells

Requestor:

WiCell Research Institute

Quality Assurance Department

Receive Date: 03/04/19

Report Sent: 03/14/19

Assay Date: 03/06/19, 03/12/19

File Name: STR 190313 wmr

Report Date: 03/14/19

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 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 14318-STR cells submitted by WiCell QA dated and received on 03/04/19, this sample (Label on Tube: 14318-STR) defines the STR profile of the human stem cell line MIN21i-34363.B comprising 25 allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: No STR polymorphisms other than those corresponding to the human MIN21i-34363.B 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 14318-STR sample submitted corresponds to the MIN21i-34363.B 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 03/14/19

X *WMR*

Digitally Signed on 03/14/19

██████████, BA
TRIP Laboratory, Molecular

██████████, PhD, Director / Co-Director
UWHC Molecular Diagnostics Laboratory / UWSPH 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>
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Sterility Report

Biotest Laboratories, Inc.

Making life-saving products possible

WiCell Research Institute, Inc.
WiCell Quality Assurance
504 South Rosa Road, Room 101
Madison, WI 53719

BIOTEST SAMPLE # 16020409
VALIDATION # NG
TEST PURPOSE NG

PRODUCT MIN19i-33811.D-WB20032 11514
MIN20i-34363.A-WB20384 11515
MIN21i-34363.B-WB20385 11516
MIN15i-33363.D-WB20945 11517
MIN14i-33363.C-WB20811 11518
MIN17i-33808.B-WB20714 11519
MIN16i-33808.A-WB20715 11520
DF19-9-7T-WB0136 11521
JFHZ3-DB29774 11522
JFHZ2-DB29769 11523

PRODUCT LOT	NA	BI LOT	NA
STERILE LOT	NA	BI EXPIRATION DATE	NA
STERILIZATION LOT	NA	DATE RECEIVED	2016-02-02
STERILIZATION DATE	NA	TEST INITIATED	2016-02-05
STERILIZATION METHOD	NA	TEST COMPLETED	2016-02-19
SAMPLING BLDG / ROOM	NA		

REFERENCE Processed according to LAB-003: Sterility Test Procedure

Ten (10) products were each divided between 40 mL TSB and 40 mL FTG. The samples were then cultured at 20-25 C and 30-35 C respectively and were monitored for a minimum of 14 days.

- USP
 BI Manufacturers Specifications
 Other

RESULTS	# POSITIVES	# TESTED	POSITIVE CONTROL	NEGATIVE CONTROL
Sterile	0	10	NA	2 Negatives

COMMENTS NA

REVIEWED BY



DATE

22 FEB 16

Specific test results may not be indicative of the characteristics of any other samples from the same lot or similar lots. Liability is limited to the costs of the tests.

Biotest Laboratories ■ 9303 West Broadway Ave. ■ Brooklyn Park, MN 55445 ■ USA ■ (763) 315-1200

A subsidiary of STERIS Corporation





Mycoplasma Assay Report

PCR-based assay performed by WiCell

WiCell SCB

01Mar2019

FORM SOP-CH-044.03

Version B Edition 02

#	Sample Name	Result	Comments/Suggestions
1	MIN21i-34363.B-WB20385 14318	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma
2	Positive (+) Control	Positive	
3	Negative (-) Control	Negative	

Reported by: Gustavo Velazquez, Research Specialist - Cytogenetics

Reviewed by: Sondra Minter, Cell Culture Specialist

Date: _____ **Sent By:** _____ **Sent To:** _____

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A gel image is available upon request.