



Thaw and Culture Details

Cell Line Name	MIN06i-33110.2H
WiCell Lot Number	WB20163
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	p23 These cells were cultured for 22 passages prior to freeze. WiCell adds +1 to the passage number at freeze so that the number on the vial best represents the overall passage number of the cells at thaw.
Date Viald	05-June-2015
Vial Label	MIN06i-33110.2H p23 WB20163
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
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	Biotest Laboratories	ST/07	Negative	Pass
Mycoplasma	WiCell	SOP-QU-004	Negative	Pass
Karyotype by G-banding	WiCell	SOP-CH-003	Expected karyotype ¹	Pass

¹This is the first karyotype of this cell line.



Testing Reported by Provider

Test Description & Method	Result
Embryoid Body Formation	RT(q)PCR (Brachyury, GATA2 - Meso; AFP, Sox17 - Endo; Pax6, MAP2 - Ectoderm)
Pluripotency Markers; AP, Oct4, Nanog, SSEA-3, SSEA-4, TRA1-60	All Markers Expressed

Approval Date	Quality Assurance Approval
09-October-2015	<p style="text-align: right;">6/24/2016</p> <p>X AMK</p> <p><small>AMK Quality Assurance Signed by Klade, Anjelica</small></p>

Short Tandem Repeat Analysis

Department of Pathology and Laboratory Medicine
TRIP Laboratory (Molecular)
<http://www.pathology.wisc.edu/research/trip>

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

Sample Report:

11641-STR
Sample Name on Tube: 11641-STR
63.6 ng/μL, (A260/280=1.80)
Sample Type: Cells
Cell Count: ~2 million cells

Requestor:

WiCell Research Institute
Quality Department

Sample Date: N/A

Receive Date: 05/11/16
Assay Date: 05/17/16
File Name: STR 160518 wmr
Report Date: 05/23/16

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 11641-STR cells submitted by WiCell QA dated and received on 05/11/16, this sample (Label on Tube: 11641-STR) defines the STR profile of the human stem cell line MIN06i-33110.2H comprising 29 allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: No STR polymorphisms other than those corresponding to the human MIN06i-33110.2H 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 11641-STR sample submitted corresponds to the MIN06i-33110.2H 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 05/23/16

TRIP Laboratory, Molecular

X_{WMR}

Digitally Signed on 05/23/16

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>

TRIP agrees to maintain the confidentiality of any information provided to it in connection with its performance of this STR analysis on the same conditions as set forth in paragraph 2 of WiCell's Terms and Conditions of Service (<http://www.wicell.org/media.acux/1a429b84-2b54-44a4-8ad8-5c05db93dd8a>).

Sterility Report

Biotech Laboratories, Inc.

Making life-saving products possible

WiCell Research Institute, Inc.
WiCell Quality Assurance

BIOTEST SAMPLE # 15101757

VALIDATION # NG

TEST PURPOSE NG

PRODUCT

WA28-WB0201 11409, WA28-WB0202 11410, WA29-WB0203 11411,
WA29-WB0204 11412, WA30-WB0213 11413, WA30-WB0214 11414
WA31-WB0215 11415, WA31-WB0216 11416, WA32-WB0217 11417
WA33-WB0220 11419, WA33-WB0221 11420, WA34-WB0222 11421
WA35-WB0224 11422, WA35-WB0225 11423, WA36-WB0226 11424
WA36-WB0227 11425, WA37-WB0228 11426, WA37-WB0229 11427
WA38-WB0230 11428, WA38-WB0231 11429, WA39-WB0233 11430
WA39-WB0234 11431, WA40-WB0235 11432, WA40-WB0236 11433
WA41-WB0241 11434, WA42-WB0242 11435, WA42-WB0243 11436
WA43-WB0244 11437, WA43-WB0245 11438, WA44-WB0246 11439
WA44-WB0247 11440, WA45-WB0254 11441, WA45-WB0255 11442
WA46-WB0256 11443, WA46-WB0257 11444, WA47-WB0258 11445
WA47-WB0259 11446, H9 hOct4-pGZ-WB22367 11451
MIN05i-33110.2F-WB20162 11452, MIN06i-33110.2H-WB20163 11453

PRODUCT LOT

NA

STERILE LOT

NA

BI LOT

NA

STERILIZATION LOT

NA

BI EXPIRATION DATE

NA

STERILIZATION DATE

NA

DATE RECEIVED

2015-10-21

STERILIZATION METHOD

NA

TEST INITIATED

2015-10-23

SAMPLING BLDG / ROOM

NA

TEST COMPLETED

2015-11-06

REFERENCE

Processed according to LAB-003: Sterility Test Procedure

Forty (40) products were each cultured in 40 mL TSB at 20-25 C and 40 products were each cultured in 40 mL FTG at 30-35 C and monitored for a minimum of 14 days.

- USP
 BI Manufacturers Specifications
 Other

RESULTS

Sterile

POSITIVES

0

TESTED

40

POSITIVE CONTROL

NA

NEGATIVE CONTROL

2 Negatives

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

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

A subsidiary of STERIS Corporation

BIOTEST SAMPLE # 15101757

COMMENTS NA

REVIEWED BY



DATE

06 NOV 15

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





Mycoplasma Detection Assay Report

Testing Performed by WiCell

Lot Release Testing

May 6th, 2016

FORM SOP-QU-004.01

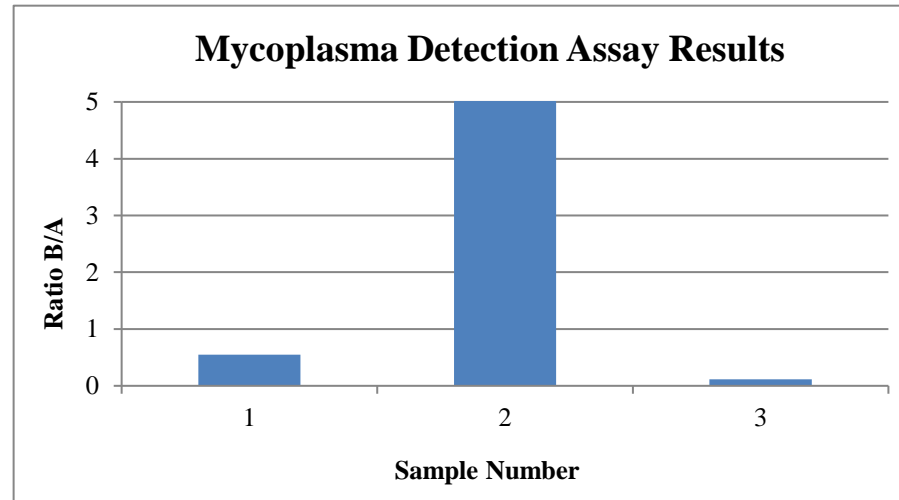
Version E Edition 01

Reported by: SS

Reviewed by: JB

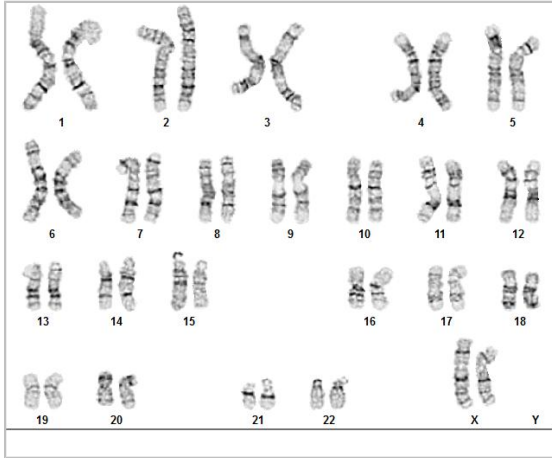
Berthold Flash n' Glo 539

#	Sample Name	Reading A			Reading B			Ratio B/A	Result	Comments/Suggestions
		RLU1	RLU2	Ave	RLU1	RLU2	Ave			
1	MIN06i-33110.2H-WB20163 11641	160	157	158.5	93	81	87	0.55	Negative	
2	Positive (+) Control	225	238	231.5	19246	19260	19253	83.17	Positive	
3	Negative (-) Control	342	336	339	40	37	38.5	0.11	Negative	



Date Reported: Friday, May 06, 2016
Cell Line: MIN06i-33110.2H-WB20163 11641
Passage#: 23
Date of Sample: 5/2/2016
Specimen: iPSC
Results: 46,XX

Cell Line Gender: Female
Reason for Testing: Lot release testing
Investigator: [REDACTED], CDM



Cell: 21
Slide: 3
Slide Type: Karyotype

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

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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