



Thaw and Culture Details

Cell Line Name	B2M-/- Elf1
WiCell Lot Number	WB67160
Provider	University of Washington – Dr. David Russell
Banked By	WiCell
Thaw and Culture Recommendations	WiCell recommends thawing 1 vial into 3 wells of a 6 well plate.
Culture Platform	Feeder Dependent
	Medium: cKOSR
	Matrix: MEF
Protocol	WiCell Feeder Dependent Protocol and Supplement Culture of Elf1 Cells
Passage Number	p8 These cells were cultured for 7 passages prior to freeze and post colony picking. 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 8.
Date Vialied	19-April-2019
Vial Label	B2M-/- Elf1 hESC p8 WB67160
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
	<p>Results: 89~93,XXXX,-15,+17,i(17)(q10)x2,-18,add(20)(q13),+mar[cp20] Interpretation: This is an abnormal, near-tetraploid, unbalanced karyotype with complex structural and numerical abnormalities. The results are written as a composite (“cp”). There are undefined and apparently unbalanced structural abnormalities (“add” and “mar”) that cannot be characterized by G-banded chromosome analysis. Additional testing, e.g., chromosomal microarray or spectral karyotyping (SKY), may be helpful in characterization of this specimen. The karyogram images above are representative; most, but not all, consistent abnormalities are present in these cells. No other clonal abnormalities were detected at the stated band level of resolution. No normal cells were observed.</p>			
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 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
18-July-2019	<p style="text-align: right;">5/6/2020</p> <p>X HEB _____ HEB Quality Assurance Signed by: Bruner, Haley</p>

Date Reported: Monday, July 01, 2019

Cell Line Sex: Female

Cell Line: B2M-/- E1f1-WB67160 14758

Reason for Testing: Lot Release Testing

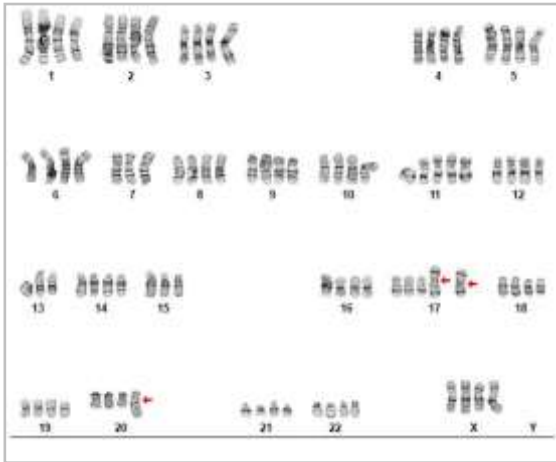
Passage#: 8

Date of Sample: 5/30/2019

Investigator: [REDACTED], WiCell

Specimen: Human ES

Results: 89~93,XXXX,-15,+17,i(17)(q10)x2,-18,add(20)(q13),+mar[cp20]



Cell: 101

Slide: G01

Slide Type: Karyotype

Total Counted: 20

Total Analyzed: 19

Total Karyogrammed: 13

Band Resolution: 375 - 450

Interpretation:

This is an abnormal, near-tetraploid, unbalanced karyotype with complex structural and numerical abnormalities. The results are written as a composite ("cp"). There are undefined and apparently unbalanced structural abnormalities ("add" and "mar") that cannot be characterized by G-banded chromosome analysis. Additional testing, e.g., chromosomal microarray or spectral karyotyping (SKY), may be helpful in characterization of this specimen.

The karyogram images above are representative; most, but not all, consistent abnormalities are present in these cells.

No other clonal abnormalities were detected at the stated band level of resolution. No normal cells were observed.

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-home/>
 (608) 265-9168

characterization@wicell.org
 (608) 316-4145

Sample Report:
 14645-STR
Sample Name on Tube: 14645-STR
 50.4 ng/μL, (A260/280=1.88)
Sample Type: Cells
Cell Count: ~2 million cells

Requestor:
 WiCell Research Institute
 Quality Assurance Department

Receive Date: 05/20/19
Report Sent: 05/24/19
Assay Date: 05/21/19
File Name: STR 190522 wmr
Report Date: 05/23/19

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	24,24
TPOX	6-13	8,9
D8S1179	7-18	13,14
vWA	10-22	17,18
Amelogenin	X,Y	X,X
Penta_D	2.2, 3.2, 5, 7-17	13,14
CSF1PO	6-15	10,11
D16S539	5, 8-15	11,11
D7S820	6-14	8,10
D13S317	7-15	11,13
D5S818	7-16	11,13
Penta_E	5-24	5,12**
D18S51	8-10, 10.2, 11-13, 13.2, 14-27	15,18
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	29,31
TH01	4-9,9.3,10-11,13.3	6,8
D3S1358	12-20	16,16

Results: Based on the 14645-STR cells submitted by WiCell QA dated and received on 05/20/19, this sample (Label on Tube: 14645-STR) defines the STR profile of the human cell line B2M^{-/-} Elf1 comprising 27 allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: No STR polymorphisms other than those corresponding to the human B2M^{-/-} Elf1 cell line were detected however, allelic imbalance (denoted by ** in table above) was observed at the Penta_E loci and could be the result of chromosomal gains and/or losses in this cell line. 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 14645-STR sample submitted corresponds to the B2M^{-/-} Elf1 cell line and was 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%.

X_{RMB}

Digitally Signed on 05/24/19

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

X_{WMR}

Digitally Signed on 05/24/19

██████████, PhD, Director / Co-Director
 UWMC 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: <https://research.pathology.wisc.edu/acknowledging-trip/>
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Native Product Sterility Report



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

SAMPLE #: 19050849
DATE RECEIVED: 09-May-19
TEST INITIATED: 15-May-19
TEST COMPLETED: 29-May-19

SAMPLE NAME / DESCRIPTION:

MCW057i-A3286	WB67153	14647
B2M-/Etrimer Elf1	WB67154	14648
MCW033i-A7195	WB67156	14649
MCW061i-40000329	WB67157	14650
MCW059i-40001067	WB67158	14651
MCW070i-40002330	WB67159	14652
B2M-/- Elf1	WB67160	14653
JHU210i	WB67162	14654
MCW052i-40001760	WB67163	14655
B2M-/Edimer Elf1	WB67155	14656
MCW063i-40000190	WB67164	14657
MCW065i-40001296	WB67165	14658
B2M-/Edimer(preCre)Elf1	WB67166	14659
MCW069i-40000268	WB67167	14660
MCW093i-40000435	WB67168	14661
PACS1003i-GM27161	DB67161	14662
STAN011i-123-1	DB31129	14663
STAN012i-123-2	DB31135	14664
STAN015i-178-1	DB31094	14665
STAN016i-178-2	DB31107	14666

UNIQUE IDENTIFIER: NA

TEST RESULTS:

# Tested	# Positives (Growth)	- Control
20	0	2 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

PD #:

000053

TEST METHODOLOGY:

USP - Direct Transfer



Mycoplasma Assay Report

PCR-based assay performed by WiCell

Lot Release Testing

20May19

FORM SOP-CH-044.03

Version B Edition 01

#	Sample Name	Result	Comments/Suggestions
1	B2M-/- E1f1-WB67160 14685	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
2	Positive (+) Control	Positive	
3	Negative (-) Control	Negative	

Reported by: Katie Remondini, Cell Culture Specialist

Reviewed by: Sondra Minter, Cell Culture Specialist

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

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A gel image is available upon request.