Thaw and Culture Details

Cell Line Name	**B2M-/Edimer(preCre)Elf1**
WiCell Lot Number	**WB67166**
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: Elf1 cKOSR
	Matrix: MEF
Protocol	WiCell Feeder Dependent Protocol and Supplement Culture of Elf1 Cells
Passage Number	p7 These cells were cultured for 6 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 7.
Date Vialed	25-April-2019
Vial Label	B2M−/Edimer(preCre)Elf1 p7 WB67166
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: 47,XX,+17[2]/46,XX[13] ***Interpretation:*** This is an abnormal karyotype. An extra copy of chromosome 17 (trisomy 17) is present in two of fifteen cells examined. Gain of chromosome 17 is recurrently acquired in pluripotent stem cell cultures. No other clonal abnormalities were detected at the stated band level of resolution. This is a limited analysis, based on fifteen cells examined. Standard analysis requires examination of twenty cells. All analyzable metaphase cells were evaluated.			
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-QU-004	Negative	Pass

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The material provided under this certificate has been subjected to the tests specified and the results and data described herein are accurate based on WiCell's reasonable knowledge and belief. Appropriate Biosafety Level practices and universal precautions should always be used with this material. For clarity, the foregoing is governed solely by WiCell's Terms and Conditions of Service, which can be found at http://www.wicell.org/privacyandterms.

Testing Reported by Provider

The provider has published the following testing and results for this cell line. A link to the relevant publication is provided on the cell line specific web page on the WiCell website.

Test Description	Result	Report
Karyotype by G-banding	46,XX	Report not available

Approval Date	Quality Assurance Approval
06-June-2019	5/8/2020 X HEB HEB Quality Assurance Signed by: Bruner, Haley

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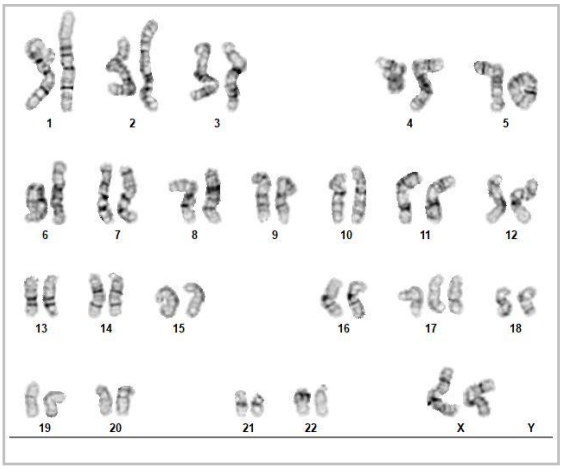
Chromosome Analysis Report: 076530

Date Reported: Thursday, May 23, 2019
Cell Line: B2M−/Edimer(preCre)Elf1-WB67166 14644
Passage#: 7
Date of Sample: 5/8/2019
Specimen: Human ES
Results: 47,XX,+17[2]/46,XX[13]

Cell Line Sex: Female
Reason for Testing: lot release testing
Investigator: [redacted], WiCell



Cell: 27
Slide: G03
Slide Type: Karyotype

Total Counted: 15
Total Analyzed: 12
Total Karyogrammed: 6
Band Resolution: 400 - 500

Interpretation:

This is an abnormal karyotype. An extra copy of chromosome 17 (trisomy 17) is present in two of fifteen cells examined. Gain of chromosome 17 is recurrently acquired in pluripotent stem cell cultures. No other clonal abnormalities were detected at the stated band level of resolution.

This is a limited analysis, based on fifteen cells examined. Standard analysis requires examination of twenty cells. All analyzable metaphase cells were evaluated.

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

TRIPath
HISTOLOGY - IHC - MOLECULAR - IMAGING
Department of Pathology and Laboratory Medicine
TRIP Laboratory (Molecular)
https://research.pathology.wisc.edu/trip-home/
(608) 265-9168

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

Sample Report:
14644-STR
Sample Name on Tube: 14644-STR
68.1 ng/µL, (A260/280=1.86)
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	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 14644-STR cells submitted by WiCell QA dated and received on 05/20/19, this sample (Label on Tube: 14644-STR) defines the STR profile of the human cell line B2M−/Edimer(preCre)Elf1 comprising 27 allelic polymorphisms across the 15 STR loci analyzed.**

Interpretation: **No STR polymorphisms other than those corresponding to the human B2M−/Edimer(preCre)Elf1 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 14644-STR sample submitted corresponds to the B2M−/Edimer(preCre)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**

[redacted], *BA*
TRIP Laboratory, Molecular

X *WMR* **Digitally Signed on 05/24/19**

[redacted], *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: ***https://research.pathology.wisc.edu/acknowledging-trip/***
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Native Product Sterility Report

STERIS

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

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

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

Native Product Sterility Report

STERIS

COMMENTS: NA

REVIEWED BY _____ DATE 29May19

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.Results applied to samples as received.

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−/Edimer(preCre)Elf1-WB67166 14686	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.