

Thaw and Culture Details

Cell Line Name	MCW071i-U2177			
WiCell Lot Number	WB66552			
Provider	Medical College of Wisconsin – Laboratory of Dr. Ulrich Broeckel			
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: TeSR™-E8™			
	Matrix: Matrigel®			
Protocol	WiCell Feeder Independent E8 Medium Protocol			
Passage Number	p16 These cells were cultured for 15 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 16.			
Date Vialed	24-August-2017			
Vial Label	MCW071i-U2177 p16 WB66552			
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

1000119110111101111011					
Test Description	Test Provider	Test Method	Test Specification	Result	
	WiCell	SOP-CH-003	Expected karyotype	See Report	
	Results: 46,XY,t(14;21) Nonclonal findings: 46,XY	² ,-8,+18			
Karyotype by G-banding	long (q) arm of chromoson	ne 14 and the long arr	e. An apparently balanced transloca m of chromosome 21 is present in fil	teen of twenty	
	cells examined. No other 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	ng clonal abnormality o	or to low-level mosaicism.		
Post-Thaw Viable Cell			≥ 15 Undifferentiated Colonies prior to passage,		
Recovery	WiCell	SOP-CH-305	≤ 30% Differentiation prior to	Pass	
			passage, and recoverable attachment after passage		
Identity by STR	UW Translational	PowerPlex 16 HS	Defines STR profile of deposited	Dage	
	Research Initiatives in Pathology Laboratory	System by Promega	cell line	Pass	
Sterility	Steris	ST/07	Negative	Pass	
Mycoplasma	WiCell	SOP-CH-044	Negative	Pass	



Testing Reported by Provider

The Provider stated that some or all of the additional analyses listed below may have been performed for this cell line. For more information, publication and dbGaP links, where available, are provided on the cell line specific web page on the WiCell website.

- Tra1-60 marker expression
- mRNA expression by qPCR
- Infinium® Expanded Multi-Ethnic Genotyping Array (MEGAEX)

Approval Date	Quality Assurance Approval	
14-May-2018	5/21/2020 X JKG JKG Quality Assurance Signed by Gay, Jenna	



Chromosome Analysis Report: 074672

Male

Reason for Testing: Lot Release Testing

ı, WiCell

Cell Line Sex:

Investigator:

Date Reported: Wednesday, January 23,

2019

Cell Line: MCW071i-U2177-WB66552 13791

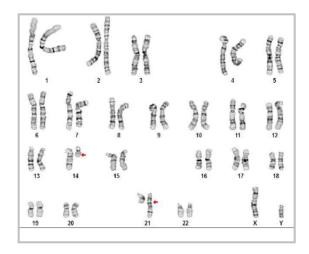
Passage#: 16

Date of Sample: 1/15/2019

Specimen: Human IPS

Results: 46,XY,t(14;21)(q13;q22.1)[15]/46,XY[4]

Nonclonal findings: 46,XY,-8,+18



Cell: 21 Slide: G01

Slide Type: Karyotype

Total Counted: 20
Total Analyzed: 9

Total Karyogrammed: 4
Band Resolution: 475 - 525

Interpretation:

This is an abnormal karyotype. An apparently balanced translocation between the long (q) arm of chromosome 14 and the long arm of chromosome 21 is present in fifteen of twenty cells examined. No other 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:	, CG(ASCP)
Reviewed and Interpreted by:	, PhD, FACMG

)ate:	Sent By:	Sent To:	QC Review By:
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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.

TRIPath

Short Tandem Repeat **Analysis** HISTOLOGY - IHC - MOLECULAR - IMAGING



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: 13791-STR

Sample Name on Tube: 13791-STR

75.9 ng/ μ L, (A260/280=1.87)

Sample Type: Cells

Cell Count: ~2 million cells

Requestor: WiCell Research Institute Quality Assurance Department **Receive Date:** 02/11/19 **Report Sent:** 02/15/19 Assay Date: 02/12/19 File Name: 02/15/19

Report Date: STR 190212 wmr

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
TPOX	6-13	been redacted to
D8S1179	7-18	protect donor
vWA	10-22	confidentiality. If
Amelogenin	X,Y	more information
Penta D	2.2, 3.2, 5, 7-17	is required, please, contact
CSF1PO	6-15	WiCell's Technical
D16S539	5, 8-15	Support.
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 13791-STR cells submitted by WiCell QA dated and received on 02/11/19, this sample (Label on Tube: 13791-STR) defines the STR profile of the human stem cell line MCW071i-U2177 comprising 28 allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: No STR polymorphisms other than those corresponding to the human MCW071i-U2177 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 13791-STR sample submitted corresponds to the MCW071i-U2177 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 $\sim 2-5\%$.

X RMB	Digitally Signed on	02/15/19	X WMR	Digitally Signed on 02/15/19
, BA TRIP Laboratory, Molecular		UWHC Mole	, PhD, Director / Co-Director ecular Diagnostics Laboratory / UWSMPH TRIP Laboratory	

Native Product Sterility Report



WiCell

504 S Rosa Rd, Rm 101 Madison, WI 53719 CORRECTED REPORT SAMPLE #:

17090875

DATE RECEIVED:

14-Sep-17

TEST INITIATED:

18-Sep-17

TEST COMPLETED:

02-Oct-17

SAMPLE NAME / DESCRIPTION:

MCW003i-40001883-WB66553_12835, MCW047i-U2234-WB66549_12836, MCW071i-U2177-WB66552_12837, MCW086i-40000176-WB66545_12838, MCW090i-40000374-WB66557_12839, MCW091i-U2202-WB66554_12840,

MCW097i-400001654-WB66548_12841, MCW112i-40000893-

WB66551_12842, MCW116i-40001890-WB66550_12843, MCW073i-40000527-WB66570_12844, MCW060i-U2183-WB66559_12845, JFHZ4-WB66573_12846, JFHZ5-WB66587_12847, JFHZ6-WB66583_12848, JFMD6-WB66581_12849, JFNY2-WB66584_12850, JFRBi5-WB66569_12851, JFWT2-WB66586_12852, JFWT4-WB66582_12853, UCSD239i-APP2-1-WB66585_12854, MCW100i-U2341-WB66575_12881, MCW114i-U2144-WB66566_12882, iPS(IMR90)-2-

WB66588_12883, UCSD035i-4-4-WB62259_12884, UCSD064i-20-2-WB63303_12885, UCSD143i-87-1-WB57685_12886, UCSD161i-93-1-WB54536_12887, UCSD199i-107-1-WB59910_12888, UCSD209i-24-1-

WB57661_12889, UCSD081i-1-14-WB61903_12890

UNIQUE IDENTIFIER:

NA

PRODUCT REGISTRATION:

Other: Human iPS Cells

TEST RESULTS:

# Tested	# Positives (Growth)	- Control
30	0	2 Negatives

TEST SUMMARY:

# Samples	Media Type	Volume (mL)	Incubation Temperature (° C)	Incubation Duration (Days)
30	TSB	40	20-25	14
30	FTG	40	30-35	14

REFERENCE:

Processed according to LAB-003: Sterility Test Procedure

METHOD VALIDATION / PD #:

000053

TEST METHODOLOGY:

USP - Direct Transfer

STERIS Laboratories, Inc. 9303 West Broadway Ave Brooklyn Park, MN 55445 LAB-003 rev 30 Form 5 Effective: 2017-08-29 Page 1 of 2

Native Product Sterility Report



COMMENTS:

Sample # 17090875

Report revised due to Customer request to update Sample Name / Description.

REVIEWED BY_____

DATE MOGT

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.

WiCell

PCR Mycoplasma Assay Report Testing Performed by WiCell

Testing Performed by WiCell WiCell 16Jan19

#	Sample Name	Result	Comments/Suggestions
1	WC040i-17097-01-26-DB66996 14251	Negative	Band was not seen at 270bp, indicating the absense of mycoplasma
2	WC039i-17097-01-22-DB66995 14250	Negative	Band was not seen at 270bp, indicating the absense of mycoplasma
3	JHU002i-1-DB40935 14247	Negative	Band was not seen at 270bp, indicating the absense of mycoplasma
4	JHU152i-DB36333 14249	Negative	Band was not seen at 270bp, indicating the absense of mycoplasma
5	JHU238i-DB37055 14232	Negative	Band was not seen at 270bp, indicating the absense of mycoplasma
6	STAN070i-169-2-DB31078 14246	Negative	Band was not seen at 270bp, indicating the absense of mycoplasma
7	JHU176i-DB36383 14248	Negative	Band was not seen at 270bp, indicating the absense of mycoplasma
8	JHU183i-DB36760 14233	Negative	Band was not seen at 270bp, indicating the absense of mycoplasma
9	MCW041i-U2104-WB66494 13788	Negative	Band was not seen at 270bp, indicating the absense of mycoplasma
10	MCW036i-A3170-WB66501 13783	Negative	Band was not seen at 270bp, indicating the absense of mycoplasma
11	MCW071i-U2177-WB66552 13791	Negative	Band was not seen at 270bp, indicating the absense of mycoplasma
12	MCW034i-A2780-WB66502 13782	Negative	Band was not seen at 270bp, indicating the absense of mycoplasma
13	WC041i-17097-01-34-DB66988 14229	Negative	Band was not seen at 270bp, indicating the absense of mycoplasma
14	Positive (+) Control	Positive	
15	Negative (-) Control	Negative	

Reported by:	, C	, Cell Culture Specialist		
Reviewed by:		Research Specialist - Cytogenetics		
Date:	S	ent By:	Sent To	

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A gel image is available upon request.