

Thaw and Culture Details

Cell Line Name	MCW091i-U2202						
WiCell Lot Number	WB66554						
Provider	rovider Medical College of Wisconsin – Laboratory of Dr. Ulrich Broeckel						
Banked By	WiCell						
Thaw and Culture WiCell recommends thawing 1 vial into 2 wells of a 6 well plate. Recommendations							
Culture Platform	Feeder Independent						
	Medium: TeSR™-E8™						
	Matrix: Matrigel®						
Protocol WiCell Feeder Independent E8 Medium Protocol							
Passage Number	p19 These cells were cultured for 18 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 19.						
Date Vialed	24-August-2017						
Vial Label	MCW091i-U2202 p19 WB66554						
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

reeding removal by meen									
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-QU-004	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 gPCR
- Infinium® Expanded Multi-Ethnic Genotyping Array (MEGAEX)



Approval Date	Quality Assurance Approval			
14-May-2018	1/17/2019 X JKG JKG Quality Assurance Signed by Gay, Jenna			



Chromosome Analysis Report: 074377

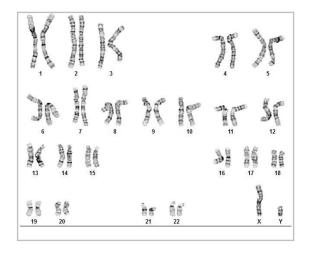
Date Reported: Wednesday, January 02, 2019 Cell

Cell Line: MCW091i-U2202-WB66554 14191

Passage#: 19

Date of Sample: 12/19/2018 Specimen: Human IPS

Results: 46,XY



Cell Line Sex: Male

Reason for Testing: lot release testing

Investigator: WiCell

Cell: 3

Slide: G03

Slide Type: Karyotype

Total Counted: 20
Total Analyzed: 8

Total Karyogrammed: 4
Band Resolution: 425 - 575

Interpretation:

This is a normal karyotype; no clonal abnormalities were detected at the stated band level of resolution.

Completed by: , CG(ASCP)

Reviewed and Interpreted by: , 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 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: 14191-STR

Sample Name on Tube: 14191-STR

90.9 ng/ μ L, (A260/280=1.85)

Sample Type: Cells

Cell Count: ~2 million cells

Requestor: WiCell Research Institute Quality Assurance Department **Receive Date:** 01/02/19 **Report Sent:** 01/07/19 **Assav Date:** 01/02/19

File Name: STR 190103 revised wmr

Report Date: 01/07/19

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			
TPOX					
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,			
CSF1PO	6-15	please, contact WiCell's Technical			
D16S539	5, 8-15	Support.			
D7S820	6-14	Ουρροιτ.			
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 14191-STR cells submitted by WiCell QA dated and received on 01/02/19, this sample (Label on Tube: 14191-STR) defines the STR profile of the human stem cell line MCW091i-U2202 comprising 28 allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: No STR polymorphisms other than those corresponding to the human MCW091i-U2202 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 14191-STR sample submitted corresponds to the MCW091i-U2202 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	01/07/19	X WMR	Digitally Signed on	01/07/19
TRIP La	, BA boratory, Molecular		UWHC Mole	, PhD, Director / Co-Directo ecular Diagnostics Laboratory / UWS	

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:

	# Positives	
# Tested	(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

Native Product Sterility Report



COMMENTS:

Sample # 17090875

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

REVIEWED BY DAT

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.



Mycoplasma Detection Assay Report Testing Performed by WiCell

Testing Performed by WiCell Lot Release Testing December 20, 2018

FORM SOP-QU-004.01 Version G Edition 02 Reported by: AP Reviewed by: JB BD Monolight 180

		Reading A		A	Read	ling B	В	Ratio		
#	Sample Name	RLU1	RLU2	Ave	RLU1	RLU2	Ave	B/A	Result	Comments/Suggestions
1	MCW091i-U2202-WB66554 14191	259	268	263.5	80	83	81.5	0.31	Negative	
2	Positive (+) Control	397	396	396.5	30524	30825	30675	77.36	Positive	
3	Negative (-) Control	710	724	717	106	97	101.5	0.14	Negative	

