

Thaw and Culture Details

Cell Line Name	MCW034i-A2780						
WiCell Lot Number	WB66502						
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: mTeSR™1						
	Matrix: Matrigel®						
Protocol	WiCell Feeder Independent mTeSR1 Protocol						
Passage Number	p13 These cells were cultured for 12 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 13.						
Date Vialed	10-August-2017						
Vial Label	MCW034i-A2780 p13 WB66502						
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	Description Test Provider		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	
Identity by STR	UW Translational Research Initiatives in Pathology Laboratory	PowerPlex 16 HS System by Defines profile Promega		Pass
Sterility	Steris	ST/07	ST/07 Negative	
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 (MEGA^{EX})

©2018 WiCell Research Institute



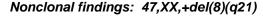
Approval Date	Quality Assurance Approval
14-May-2018	2/14/2019 XG Quality Assurance Signed by Gay, Jenna

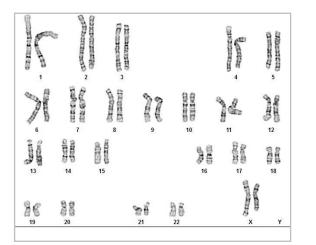
©2018 WiCell Research Institute

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.



Date Reported:Wednesday, January 23,
2019Cell Line Sex:FemaleCell Line:MCW034i-A2780-WB66502 13782Reason for Testing:Lot Release TestingPassage#:13Investigator:, WiCellDate of Sample:1/15/2019Investigator:, WiCellSpecimen:Human IPSResults:46,XX





Cell: 38 Slide: G01 Slide Type: Karyotype

Total Counted: 40 Total Analyzed: 8 Total Karyogrammed: 4 Band Resolution: 500 - 550

Interpretation:

This is a normal karyotype; no 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								
Date [.]	Sent By:	Sent To:	OC 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.

HISTOLOGY - IHC - MOLECULAR - IMAGING

Department of Pathology and Laboratory Medicine TRIP Laboratory (Molecular) https://research.pathology.wisc.edu/trip/ (608) 265-9168

Sample Report:

13782-STR Sample Name on Tube: 13782-STR 78.1 ng/μL, (A260/280=1.90) Sample Type: Cells Cell Count: ~2 million cells

Short Tandem Repeat Analysis



characterization@wicell.org (608) 316-4145

Receive Date: 01/22/19 **Report Sent:** 01/29/19 **Assay Date:** 01/24/19 **File Name:** STR 190125 wmr **Report Date:** 01/28/19

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	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,				
CSF1PO	6-15	please, contact WiCell's Technical				
D16S539	5, 8-15	Support.				
D7S820						
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					

<u>Results:</u> Based on the 13782-STR cells submitted by WiCell QA dated and received on 01/29/18, this sample (Label on Tube: 13782-STR) defines the STR profile of the human stem cell line MCW034i-A2780 comprising 27 allelic polymorphisms across the 15 STR loci analyzed.

<u>Interpretation:</u> No STR polymorphisms other than those corresponding to the human MCW034i-A2780 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 13782-STR sample submitted corresponds to the MCW034i-A2780 stem cell line and was not contaminated with any other human stem cells or a significant amount of mouse feeder layer cells.

<u>Sensitivity</u>: 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 01/29/19	X WMR	Digitally Signed on 01/29/19
TRIP La	, BA boratory, Molecular	UWHC Mole	, PhD, Director / Co-Director ecular 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 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 https://www.wicell.org/media.acux/ca76d97c-862a-43f3-b02a-ab2d1e619100. 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.

Requestor: WiCell Research Institute Quality Assurance Department

Native Product Sterility Report



		SAMPLE #:	18030537
WiCell		DATE RECEIVED:	08-Mar-18
504 S Rosa Rd, Rm 101		TEST INITIATED:	13-Mar-18
·	T	EST COMPLETED:	
Madison, WI 53719	IE	ST COMPLETED:	27-Mar-18
SAMPLE NAME / DESCRIPTION:	STAN129i-212C2 DB35772 13516		
	STAN130i-212C4 DB35777 13517		
	MCW002i-40001265 WB66495 13518		
	MCW004i-40002545 WB66488 13519		
	MCW006i-40000930 WB66499 13520		
	MCW008i-40000992 WB66496 13521		
	MCW010i-40000756 WB66487 13522		
	MCW011i-40000664 WB66486 13523		
	MCW015i-A2196 WB66497 13524		
	MCW016i-A2159 WB66510 13525		
	MCW021i-50001743 WB66448 13526		
	MCW025i-A2566 WB66504 13527		
	MCW034i-A2780 WB66502 13528		
	MCW036i-A3170 WB66501 13529		
	MCW037i-50000777 WB66459 13530		
	MCW041i-U2104 WB66494 13531		
	MCW048i-40001845 WB66460 13532		
	MCW050i-40000626 WB66467 13533		
	MCW067i-40001036 WB66478 13534		
	MCW068i-40002385 WB66452 13535		
UNIQUE IDENTIFIER:	NA	3	
PRODUCT REGISTRATION:	Other: Human iPS cells		
TEST BESULTS	# Positives	-	

TEST RESULTS:	# Tested	# Positives (Growth)	- Control
	20	0	2 Negatives

TEST SUMMARY:

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

REFERENCE:

METHOD VALIDATION / PD #:

Processed according to LAB-003: Sterility Test Procedure 000053

Native Product Sterility Report



TEST METHODOLOGY:

USP - Direct Transfer

COMMENTS: Sample #18030537

Report as per packing slip.

Dersand REVIEWED BY

DATE 28MAR18

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 January 17, 2019 FORM SOP-QU-004.01 Version G Edition 02 Reported by: AP Reviewed by: JB Berthold Flash n' Glow 539

		Reading A A		А	Read	ling B	В	Ratio		
#	Sample Name	RLU1	RLU2	Ave	RLU1	RLU2	Ave	B/A	Result	Comments/Suggestions
1	MCW034i-A2780-WB66502 13782	87	85	86	31	32	31.5	0.37	Negative	
2	Positive (+) Control	73	82	77.5	615	624	619.5	7.99	Positive	
3	Negative (-) Control	267	265	266	30	27	28.5	0.11	Negative	

