

Cell Line Information and Testing – Material Produced by Provider

Cell Line Characteristics

This table contains general information regarding the cell line.

Cell Line Name	MIN04i-33109.2B
Cell Line Alias	MIN33109 2-B
Cell Type	Induced Pluripotent Stem Cell
Disease	X-Linked Dystonia Parkinsonism
Phenotype	Affected
Sex	Male
Age at Collection	72 years
Reprogramming Method	Sendai Virus
Tissue Origin	Skin Fibroblast
Provider	Massachusetts General Hospital

Lot Specific Information

The following culture information is for the specified lot.

WiCell Lot Number	WB20383				
Banked By	WiCell				
Thaw Recommendation	WiCell recommends thawing 1 vial into 3 wells of a 6 well plate.				
Culture Platform	Feeder Independent				
	Medium: mTeSR1				
	Matrix: Matrigel				
Protocol	WiCell Feeder Independent mTeSR1 Protocol				
Passage Number	p22 These cells were cultured for 21 passages prior to freeze. WiCell adds +1 to the passage number at freeze so that the number on the vial best represents the overall passage number of the cells at thaw.				
Date Vialed	19-June-2015				
Vial Label	MIN04i-33109.2B p22 WB20383				
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.				



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Testing Reported by Provider

Test Description & Method	Result
Genetic Analysis by Karyotype	Normal
Embryoid Body Formation	RT(q)PCR (Brachyury, GATA2 - Meso; AFP, Sox17 - Endo; Pax6, MAP2 - Ectoderm)
Pluripotency Markers; AP, Oct4, Nanog, SSEA-3, SSEA-4, TRA1-60	All Markers Expressed

Testing Performed by WiCell

		<u> </u>		
Test Description	Test Provider	Test Method	Test Specification	Result
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	Biotest Laboratories	ST/07	Negative	Pass
Mycoplasma	WiCell	SOP-QU-004	Negative	Pass
Karyotype by G-banding	WiCell	SOP-CH-003	Expected karyotype	Pass

Date Available	Quality Assurance Approval		
09-October-2015	AMK AMK Quality Assurance Signed by:		



Short Tandem Repeat Analysis

WiCell®
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(888) 204-1782

Department of Pathology and Laboratory Medicine TRIP Laboratory (Molecular) http://www.pathology.wisc.edu/research/trip

Sample Report: 11528-STR

Sample Name on Tube: 11528-STR 213.3 ng/μL, (A260/280=1.92)

Sample Type: Cells

Cell Count: ~2 million cells

Requestor:WiCell Research Institute
Quality Department

Sample Date: N/A Receive Date: 02/09/16 Assay Date: 2/23/16

File Name: STR 160229 wmr

Report Date: 03/02/16

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 is
Penta_D	2.2, 3.2, 5, 7-17	required, please, contact WiCell's
CSF1PO	6-15	Technical Support.
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	

<u>Results:</u> Based on the 11528-STR cells submitted by WiCell QA dated and received on 02/09/16, this sample (Label on Tube: 11528-STR) defines the STR profile of the human stem cell line MIN04i-33109.2B comprising 26 allelic polymorphisms across the 15 STR loci analyzed.

<u>Interpretation:</u> No STR polymorphisms other than those corresponding to the human MIN04i-33109.2B 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 11528-STR sample submitted corresponds to the MIN04i-33109.2B 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 03/	/02/16	X WMR	Digitally Signed on	03/02/16
TRIP La	boratory, Molecular		UWHC Molec	, PhD, Director / Co-Directo cular Diagnostics Laboratory / UWS.	

Sterility Report

Biotest Laboratories, Inc.

Making life-saving products possible

WiCell Research Institute, I WiCell Quality Assurance	nc.		BIOTEST SAMPLE #	15081899				
Wicell &ddilly Assaidince			VALIDATION #	NG				
			TEST PURPOSE	NG				
PRODUCT	WA09(LOXGFP)-WB209 UWWC1-2DS3-WB2084 WC005i-FX11-7-WB2044 UWWC1-DS1-WB21343 WC-3801-2-WB21395 1 WA07-WB21842 11373 LT2e-H9CAGGFP-WB02 MIN01i-32517.A-WB205 MIN03i-32642.B-WB200 MIN04i-33109.2B-WB203	6 11369 49 11370 11371 1372 207 11374 71 11375 13 11376						
PRODUCT LOT	NA							
STERILE LOT	NA		BI LOT NA					
STERILIZATION LOT	NA		BI EXPIRATION DATE NA					
STERILIZATION DATE	NA		DATE RECEIVED	2015-08-27				
STERILIZATION METHOD	NA		TEST INITIATED	2015-08-28				
SAMPLING BLDG / ROOM	NA		TEST COMPLETED	2015-09-11				
REFERENCE	Processed according to LAB-003: Sterility Test Procedure							
				and 40 mL FTG. The samples and were monitored for a				
	□ USP □ BI Manufacturers Spe □ Other	ecifications						
RESULTS Sterile	# POSITIVES 0	# TESTED 10	POSITIVE CONTR NA	NEGATIVE CONTROL 2 Negatives				
COMMENTS NA								

Specific test results may not be indicative of the characteristics of any other samples from the same lot or similar lots. Liability is limited to the costs of the tests.

Biotest Laboratories = 9303 West Broadway Ave. = Brooklyn Park, MN 55445 = USA = (763) 315-1200

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REVIEWED BY

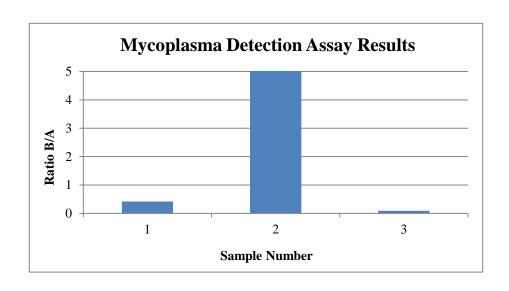
DATE //Sup/5



Mycoplasma Detection Assay Report Testing Performed by WiCell

Testing Performed by WiCell Lot Release Test February 4th, 2016 FORM SOP-QU-004.01 Version E Edition 01 Reported by: SS Reviewed by: JB Berthold Flash n' Glo 539

		Read	ing A	A	Read	ing B	В	Ratio		
#	Sample Name	RLU1	RLU2	Ave	RLU1	RLU2	Ave	B/A	Result	Comments/Suggestions
1	MIN04i-33109.2B-WB20383 11528	114	109	111.5	44	49	46.5	0.42	Negative	
2	Positive (+) Control	115	119	117	9701	9657	9679	82.73	Positive	
3	Negative (-) Control	247	241	244	21	23	22	0.09	Negative	





Chromosome Analysis Report: 030603

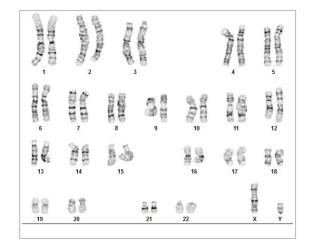
Date Reported: Tuesday, February 09, 2016 Cell Line: MIN04i-33109.2B-WB20383 11528

Passage#: 22

Date of Sample: 2/5/2016

Specimen: iPSC Results: 46,XY

Nonclonal Findings: 46,XY,i(20)(q10)



Cell Line Gender: Male

Reason for Testing: Lot release testing

Investigator: , WiCell CDM

Cell: 29 Slide: 1

Slide Type: Karyotype

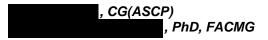
Total Counted: 20
Total Analyzed: 8
Total Karyogrammed: 4
Band Resolution: 450 - 500

Interpretation:

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

There is one nonclonal finding, listed above. Standard analysis requires that chromosomes are counted in twenty cells. Twenty additional cells were examined with no further evidence of this nonclonal aberration. Nonclonal findings likely result from technical artifact, but may be due to a developing clonal abnormality or to low-level mosaicism.

Completed By: Reviewed and Interpreted By:



A signed copy of this report is available upon request.

Date:	Sent By:	Sent To:	QC Review By:
Date	Sent by	Sent ro	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 may not be relied upon by any other party without the prior written consent of the Director of the WiCell Cytogenetics Laboratory. The results of this assay are for research use only. If the results of this assay are to be used for any other purpose, contact the Director of the WiCell Cytogenetics Laboratory.

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