

Product Information

Product Name	Zeng02i-iPSH14
Lot Number	WB19497
Depositor	Buck Institute for Research for Aging
Banked by	WiCell
Thaw Recommendation	Thaw 1 vial into 1 well of a 6 well plate. WiCell recommends thawing using ROCK Inhibitor for best results.
Culture Platform	Feeder Dependent
	Medium: hES Medium
	Matrix: MEF
Protocol	WiCell Feeder Dependent Protocol
Passage Number	p51
	These cells were cultured for 50 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	08-May-2015
Vial Label	Zeng02i-iPSH14 p51 WB19497
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
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	Consistent with known 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 of Lot Release	Quality Assurance Approval			
31-August-2015	8/31/2015 AMK Ouality Assurance Signed by: Carteron, Anjelica			

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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.



Short Tandem Repeat Analysis

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

Sample Report: 11290-STR Sample Name on Tube: 11290-STR 119.6 ng/μL, (A260/280=1.9) Sample Type: Cells Cell Count: ~2 million cells **Requestor:** WiCell Research Institute Quality Department WiCell® info@wicell.org (888) 204-1782

Sample Date: N/A Receive Date: 06/25/15 Assay Date: 06/23/15 File Name: STR_150701 WMR Report Date: 07/03/15

STR Locus	STR Genotype Repeat #	STR Genotype
FGA	Identifying information has been redacted to protect donor confidentiality. If	21,21
ТРОХ	more information is required, please, contact WiCell's Technical Support.	8,8
D8S1179		13,14
vWA		15,16
Amelogenin		X,Y
Penta_D		12,13
CSF1PO		11,12
D16S539		11,13
D7S820		10,11
D13S317		11,11
D5S818		11,13
Penta_E		13,20
D18S51		12,14
D21S11		30,31
TH01		6,7
D3S1358		15,16

<u>Results:</u> Based on the 11290-STR cells submitted by WiCell QA dated and received on 06/25/15, this sample (Label on Tube: 11290-STR) exactly matches the STR profile of the human stem cell line WA14 comprising 27 allelic polymorphisms across the 15 STR loci analyzed.

<u>Interpretation</u>: No STR polymorphisms other than those corresponding to the human WA14 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 11290-STR sample submitted corresponds to the WA14 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%.

<i>RMB</i> Digitally Signed on 07/03/15	X WMR Digitally Signed on 07/03/15
RIP Laboratory, Molecular	, PhD, Director / Co-Director UWHC Molecular Diagnostics Laboratory / UWSMPH TRIP Laborator

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 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.

Sterility Report

Biotest Laboratories, Inc.

Making life-saving products possible

WiCell Research Institute, WiCell Quality Assurance	Inc.	1	BIOTEST SAMPLE #	15071050			
			VALIDATION #	NG			
			TEST PURPOSE	NG			
PRODUCT	Zeng02i-iPSH14-WB19497 WIC01i-02-1c-WB18031 WIP06i-iPSCas9Het-WB18 WA01-WB16377 11331 MIN07i-33113.2D-WB19575 MIN02i-33113.2I-WB19575 MIN08i-33114.B-WB19546 MIN09i-33114.C-WB19768 MIN12i-33362.C-WB19545 WC-24-02-DS-M-WB18754	11329 1995 11330 74 11332 5 11333 5 11333 6 11334 3 11335 5 11336					
PRODUCT LOT	NA						
STERILE LOT	NA		BILOT	NA			
STERILIZATION LOT	NA		BI EXPIRATION DATE	NA			
STERILIZATION DATE	NA		DATE RECEIVED	2015-07-14			
STERILIZATION METHOD	NA		TEST INITIATED	2015-07-15			
SAMPLING BLDG / ROOM	NA		TEST COMPLETED	2015-07-29			
REFERENCE	Processed according to	LAB-003: St	erility Test Procedure				
	Ten (10) products were e were then cultured at 20 minimum of 14 days.				•		
	USP BI Manufacturers Speci	fications					
RESULTS Sterile	# POSITIVES # ⁻ 0	TESTED 10	POSITIVE CONTR NA		VE CONTROL egatives		
COMMENTS NA		1					
REVIEWED BY 🗧			DATE 29JULIS				

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

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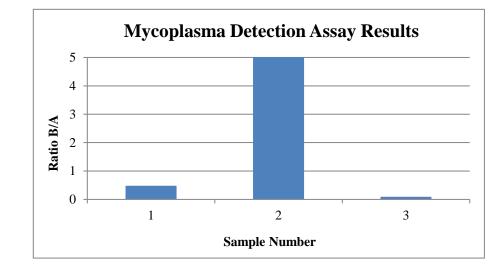
STERIS



Mycoplasma Detection Assay Report Testing Performed by WiCell

Testing Performed by WiCell Lot Release Testing 05-28-2015 FORM SOP-QU-004.01 Version D Edition 01 Reported by: SS Reviewed by: JB Berthold Flash n' Glo 539

		Read	ing A	Α	Read	ing B	В	Ratio		
#	Sample Name	RLU1	RLU2	Ave	RLU1	RLU2	Ave	B/A	Result	Comments/Suggestions
1	Zeng02i-iPSH14-WB19497 11290	234	236	235	112	113	112.5	0.48	Negative	
2	Positive (+) Control	215	213	214	16924	16915	16920	79.06	Positive	
3	Negative (-) Control	454	464	459	42	44	43	0.09	Negative	





Date Reported: Monday, June 22, 2015 Cell Line Gender: Male Cell Line: Zeng02i-iPSH14-WB19497 11290 Reason for Testing: lot release testing Passage#: 53 Date of Sample: 6/12/2015 WiCell CDM Investigator: Specimen: iPSC Results: 46,XY and a state **Cell: 25** Slide: 2 Slide Type: Karyotype Total Counted: 20 86 Total Analyzed: 8 Total Karyotyped: 4 111 Band Resolution: 425 - 475 宫宫 ŝ 5) (i)

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:CG(ASCP)A signed copy of this report is available upon request.							
Date:	Sent By: S	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 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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