

Thaw and Culture Details

Cell Line Name	UCSD241i-APP2-3						
WiCell Lot Number	DB26835						
Provider	University of California, San Diego – Laboratory of Dr. Lawrence Goldstein						
Banked By	University of California, San Diego – Laboratory of Dr. Lawrence Goldstein						
Thaw and Culture Recommendations	WiCell recommends thawing 1 vial into 2 wells of a 6 well plate using Stem Cell Culture Medium and MEF.						
Protocol	WiCell Feeder Dependent Protocol						
Culture Platform Prior to Freeze	Feeder Dependent						
	Medium: hUES Medium						
	Matrix: MEF						
Passage Number	p14 These cells were cultured for 13 passages prior to freeze and post reprogramming. The Provider adds +1 to the passage number to best represent the overall passage number of the cells at thaw.						
Date Vialed	29-July-2015						
Vial Label	iPS Appdp2.3 p14 7/29/15 ch thaw in 6 well						
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				
Karyotype by G-banding	WiCell	SOP-CH-003	Expected karyotype	Pass				
Post-Thaw Viable Cell Recovery	WiCell	SOP-CH-305	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				



Testing Reported by Provider

For more information, publication and dbGaP links, where available, are provided on the cell line specific web page on the WiCell website.

Test Description	Method	Result					
Genetic Analysis	G-Band Karyotype	Maintained euploid karyotype					
Pluripotency	FACS	Expressed the pluripotency-associated proteins NANOG and TRA1-81. See the publication for Mean % TRA1-81.					
Teratoma	Injected into nude rats	Differentiated into cells of ectodermal, mesodermal, and endodermal lineages in vitro.					

Approval Date	Quality Assurance Approval			
30-June-2016	8/6/2020 X AA AA Qualify Assurance Signed by: Arntz, Andy			



Chromosome Analysis Report: 067101

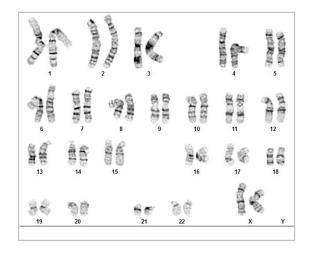
Date Reported: Friday, July 28, 2017

Cell Line: UCSD241i-APP2-3-DB26835 12622

Passage#: 14

Date of Sample: 7/19/2017 Specimen: Human IPS Cells

Results: 46,XX



Cell Line Gender: Female

Reason for Testing: lot release testing

Investigator: , WiCell CDM

Cell: 32 Slide: G02

Slide Type: Karyotype

Total Counted: 20
Total Analyzed: 8

Total Karyogrammed: 4
Band Resolution: 425 - 500

Interpretation:

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

Completed by: Reviewed and Interpreted by: , CG(ASCP) , PhD, FACMG

A signed copy of this report is available upon request.

 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 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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Short Tandem Repeat Analysis

WiCell® info@wicell.org (888) 204-1782

Department of Pathology and Laboratory Medicine TRIP Laboratory (Molecular)

http://www.pathology.wisc.edu/research/trip

Sample Report: 12622-STR

Sample Name on Tube: 12622-STR

 $69.1 \text{ ng/}\mu\text{L}, (A260/280=1.94)$

Sample Type: Cells

Cell Count: ~2 million cells

Requestor:

WiCell Research Institute Ouality Department Sample Date: N/A Receive Date: 07/24/17

Assav Date: 07/25/17

File Name: STR 170727 wmr

Report Date: 07/31/17

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							
CSF1PO	6-15	please, contact WiCell's Technical						
D16S539	5 9 15							
D7S820	6-14	Support.						
D13S317	3S317 7-15							
D5S818	7-16							
Penta_E	5-24							
D18S51	8-10, 10.2, 11-13, 13.2, 14-27							
D21S11	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 12622-STR cells submitted by WiCell QA dated and received on 07/24/17, this sample (Label on Tube: 12622-STR) defines the STR profile of the human stem cell line UCSD241i-APP2-3 comprising 28 allelic polymorphisms across the 15 STR loci analyzed.

<u>Interpretation:</u> No STR polymorphisms other than those corresponding to the human UCSD241i-APP2-3 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 12622-STR sample submitted corresponds to the UCSD241i-APP2-3 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	07/31/17	X WMR	Digitally Signed on	07/31/17
TRIP La	boratory, Molecular		UWHC Mole	, PhD, Director / Co-Direct ccular Diagnostics Laboratory / UW	

Sterility Report

Biotest Laboratories, Inc.

Making life-saving products possible

WiCell Research Institute, Inc. BIOTEST SAMPLE # 16111519

WiCell Quality Assurance

504 South Rosa Road, Room 101 VALIDATION # NG

Madison, WI 53719

TEST PURPOSE NG

PRODUCT MIN08i-33114.B-WB49930 11979, MIN09i-33114.C-WB49931 11980, UCSD034i-4-3-

WB51215 11981, UCSD068i-19-2-WB50123 11982, UCSD195i-29-2-WB50124 11983,

UCSD230i-SAD1-2-DB26801 11984, UCSD234i-SAD2-3-DB26813 11985, UCSD239i-APP2-1-DB26829 11986, UCSD240i-APP2-2-DB26832 11987, UCSD241i-APP2-3-DB26835 11988

PRODUCT LOT NA

STERILE LOT NA BI LOT NA

STERILIZATION LOT NA BI EXPIRATION DATE NA

STERILIZATION DATE NA DATE RECEIVED 2016-11-22

STERILIZATION METHOD NA TEST INITIATED 2016-11-23

SAMPLING BLDG / ROOM NA TEST COMPLETED 2016-12-07

REFERENCE Processed according to LAB-003: Sterility Test Procedure

Ten (10) products were each divided between 40 mL TSB and 40 mL FTG. The samples were then cultured at 20-25 C and 30-35 C respectively and were monitored for a

minimum of 14 days.

USP

☐ BI Manufacturers Specifications

Other

RESULTS # POSITIVES # TESTED POSITIVE CONTROL NEGATIVE CONTROL

Sterile 0 10 NA 2 Negatives

COMMENTS NA

REVIEWED BY DATE 08DECIG

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. The uncertainty of measurement associated with the measurement result reported in this certificate is available from the organization upon request.





Mycoplasma Detection Assay Report Testing Performed by WiCell

Testing Performed by WiCell Lot Release Testing July 12, 2017

FORM SOP-QU-004.01 Version F Edition 02 Reported by: KR Reviewed by: DF 12Jul17 BD Monolight 180

		Read	ing A	A	Read	ling B	В	Ratio		
#	Sample Name	RLU1	RLU2	Ave	RLU1	RLU2	Ave	B/A	Result	Comments/Suggestions
1	UCSD241i-APP2-3-DB26835 12622	370	384	377	176	172	174	0.46	Negative	
2	Positive (+) Control	349	363	356	31431	31358	31395	88.19	Positive	
3	Negative (-) Control	543	529	536	53	54	53.5	0.10	Negative	

