



## Thaw and Culture Details

Product Name	Elf1
Lot Number	WB17042
Depositor	University of Washington – Laboratory of Dr. Carol Ware
Banked by	WiCell
Thaw Recommendation	Thaw 1 vial into 2 wells of a 6 well plate.
Culture Platform	Feeder Dependent
	Medium: Elf1 cKOSR
	Matrix: MEF 3.5x10 <sup>4</sup> cells/cm <sup>2</sup>
Protocol	Feeder-Dependent Pluripotent Stem Cell Culture Protocols Supplement: Culture of Elf1 Cells
Passage Number	p11  These cells were cultured for 10 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 Viald	29-January-2015
Vial Label	Elf-1 p11 WB17042
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

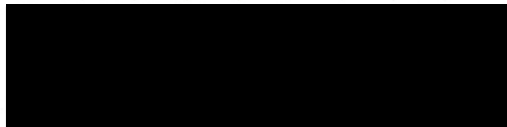
Test Description	Test Provider	Test Method	Test Specification	Result
Post-Thaw Viable Cell Recovery	WiCell	SOP-CH-305	≥ 15 Undifferentiated Colonies, ≤ 30% Differentiation and recoverable attachment after passage	Pass
Identity by STR	UW Translational Research Initiatives in Pathology Laboratory	PowerPlex 16 HS System by Promega	Consistent with STR profile of deposited cell line	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
09-April-2015	<div style="text-align: right; font-size: small;">5/27/2020</div> <div style="text-align: center;"> <b>X</b> HEB  <small>HEB Quality Assurance Signed by: Bruner, Haley</small> </div>

# Short Tandem Repeat Analysis\*

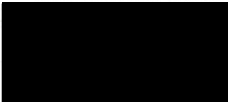


Department of Pathology and Laboratory Medicine  
TRIP Laboratory (Molecular)  
<http://www.pathology.wisc.edu/research/trip>



**Samples Report:**  
11136-STR 62.6 ng/μL  
(A260/280=1.98) ~1.4 million cells  
**Sample Name on Tube:**  
11136-STR  
**DNA Extracted by:**  
TRIP Lab

**Requestor:**  
WiCell Research Institute



**Sample Date:** 03/10/15  
**Receive Date:** 03/10/15  
**Assay Date:** 03/17/15  
**File Name:** STR 150318 TCS  
**Report Date:** 03/23/15

STR Locus	STR Genotype Repeat #	11136-STR
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	24,24
TPOX	6-13	8,9
D8S1179	7-18	13,14
vWA	10-22	17,18
Amelogenin	X,Y	X,X
Penta D	2.2, 3.2, 5, 7-17	13,14
CSF1PO	6-15	10,11
D16S539	5, 8-15	11,11
D7S820	6-14	8,10
D13S317	7-15	11,13
D5S818	7-16	11,13
Penta E	5-24	5,12
D18S51	8-10, 10.2, 11-13, 13.2, 14-27	15,18
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	29,31
TH01	4-9,9.3,10-11,13.3	6,8
D3S1358	12-20	16,16

Comments: Based on the 11136-STR cells submitted by WiCell QA dated and received on 03/10/15, this sample (Label on Tube: 11136-STR) exactly matches the STR profile of the human stem cell line Elf-1 comprising 27 allelic polymorphisms across the 15 STR loci analyzed. No STR polymorphisms other than those corresponding to the human Elf-1 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 11136-STR sample submitted corresponds to the Elf-1 stem cell line and was not contaminated with any other human stem cells or a significant amount of mouse feeder layer cells. Sensitivity limits for detection of STR polymorphisms unique to either this or other human stem cell lines is ~2-5%.

Date

3-23-15  
Date

Date

03/23/15  
Date

TRIP Laboratory, Molecular

Molecular Diagnostics Laboratory

Remember to acknowledge TRIP in your publications, posters & presentations. For details, visit:  
<http://www.pathology.wisc.edu/research/trip/acknowledging>

\* 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.

# Sterility Report

Biotest Laboratories, Inc.

Making life-saving products possible

WiCell Research Institute, Inc.  
WiCell Quality Assurance

BIOTEST SAMPLE # 15030213

VALIDATION # NG

TEST PURPOSE NG

PRODUCT WA01-WB16218 11153  
WC-3801-5-WB16848 11154  
WC009i-FX08-01-WB16840 11155  
WC-3902-06-RS-WB16975 11156  
WC-3902-08-RS-WB17010 11157  
Elf-1-WB17042 11158  
WC-3902-10-RS-WB16861 11159  
UWWC1-DS4-WB17171 11160  
UWWC1-DS2U-WB17538 11161  
UWWC1-DS1-WB17272 11162

PRODUCT LOT	NA	BI LOT	NA
STERILE LOT	NA	BI EXPIRATION DATE	NA
STERILIZATION LOT	NA	DATE RECEIVED	2015-03-03
STERILIZATION DATE	NA	TEST INITIATED	2015-03-04
STERILIZATION METHOD	NA	TEST COMPLETED	2015-03-18
SAMPLING BLDG / ROOM	NA		

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 [Redacted] DATE RMARIS

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.

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# Mycoplasma Detection Assay Report

Testing Performed by WiCell

Lot Release Testing

02-20-2015

FORM SOP-QU-004.01

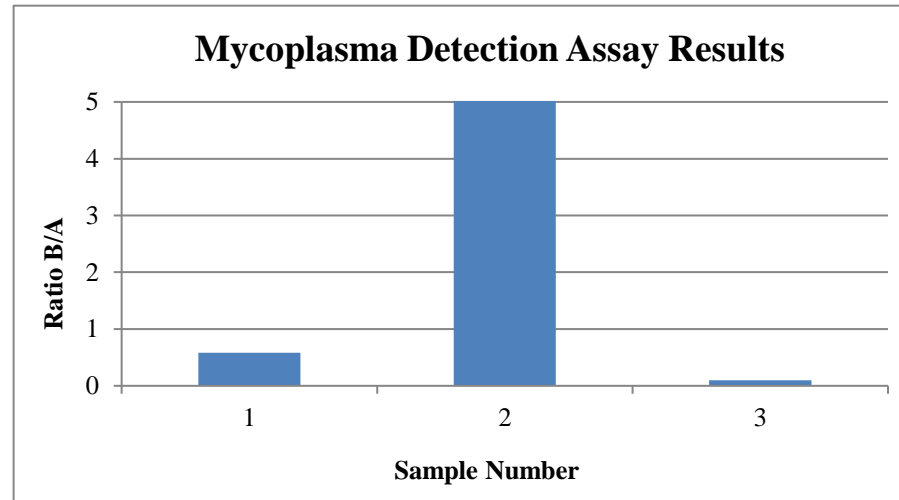
Version C Edition 01

Reported by: SS

Reviewed by: JB

Berthold Flash n' Glo 539

#	Sample Name	Reading A			Reading B			Ratio B/A	Result	Comments/Suggestions
		RLU1	RLU2	Ave	RLU1	RLU2	B Ave			
1	Elf-1 WB17042 11136	218	227	222.5	127	131	129	0.58	Negative	
2	Positive (+) Control	248	238	243	19340	19347	19344	79.60	Positive	
3	Negative (-) Control	435	440	437.5	43	43	43	0.10	Negative	



**Date Reported:** Thursday, February 26, 2015

**Cell Line Gender:** Female

**Cell Line:** Elf-1-WB17042 11136

**Reason for Testing:** Lot release testing

**Passage#:** 12

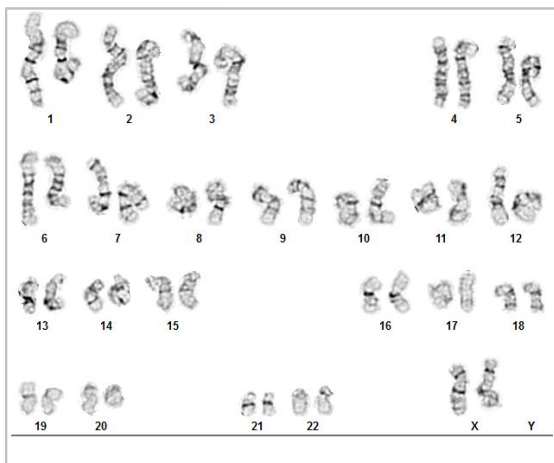
**Date of Sample:** 2/16/2015

**Investigator:** [REDACTED], WiCell CDM

**Specimen:** hESC

**Results:** 46,XX

**Nonclonal findings:** 46,X,i(X)(p10) 46,XX,i(7)(p10)



**Cell:** 41

**Slide:** 6

**Slide Type:** Karyotype

**Total Counted:** 15

**Total Analyzed:** 6

**Total Karyotyped:** 3

**Band Resolution:** 400 - 450

**Interpretation:**

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

**There are two nonclonal findings, listed above. Nonclonal findings likely result from technical artifact, but may be due to a developing clonal abnormality or to low-level mosaicism.**

**This is a limited analysis, based on examination of fifteen cells. Standard analysis requires examination of twenty cells. All available metaphase cells were evaluated.**

**Completed by:** [REDACTED], CG(ASCP)

**Reviewed and Interpreted by:** [REDACTED], 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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