

## **Certificate of Analysis for NR-48696**

# Mycobacterium tuberculosis, Strain H37Rv, Gamma-Irradiated Whole Cells Kit Containing Hypoxic and Normoxic Cultures

#### Catalog No. NR-48696

This reagent is the tangible property of the U.S. Government.

**Product Description:** NR-48696 is a kit comprised of gamma irradiated cells from two preparations of *Mycobacterium tuberculosis* (*M. tuberculosis*), strain H37Rv.

KIT COMPONENT	BEI RESOURCES PRODUCT AND LOT NUMBERS	CSU LOT NUMBER	MANUFACTURING DATE
M. tuberculosis, Strain H37Rv, Irradiated Cells (hypoxic culture)	NR-36493 lot 61449181	13.Rv.2.1.17.4.WCg.Hypoxic	04MAR2013
M. tuberculosis, Strain H37Rv, Irradiated Cells (normoxic culture)	NR-36494 lot 61449182	13.Rv.2.1.17.4.WCg.Normoxic	18FEB2013

Lot: 62689360

Production and QC testing were performed by Colorado State University (CSU). The CSU documentation for bulk lots 13.Rv.2.1.17.4.WCg.Hypoxic and 13.Rv.2.1.17.4.WCg.Normoxic is attached. The kit was assembled by BEI Resources on 16JUL2014.

ATCC<sup>®</sup>, on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected by the contractor to the tests and procedures specified and that the results described, along with any other data provided in this certificate, are true and accurate to the best of ATCC<sup>®</sup>'s knowledge.

ATCC<sup>®</sup> is a trademark of the American Type Culture Collection.

You are authorized to use this product for research use only. It is not intended for human use.

BEI Resources
www.beiresources.org

E-mail: contact@beiresources.org
Tel: 800-359-7370

## WORK SHEET FOR $\gamma$ -IRRADIATED CELLS

General Information			
Lot Number: 13.Rv.2.1 Species: M. tuberculosis Strain: H37Rv	.17.4.WCg.Hypoxic		
Growth Conditions:	Medium: GAS # of Fermentors: 1 Inoculation Date: 1.17.13 SOP # used for Harvest: PP00	Harvest Date:1.24.13 040 1/11/13 version	
Wet Weight: 6.2g	<u>-</u>		
Date irradiated: 3.4.13	By: <u>JB</u>		
Alamar Blue QC Inform	nation		
Date Started: 3.13.13	Date Checked: 3.15.13		
Positive Control: Positive	XNegative		
OD =.1 change:	0.0208		
Sample: Positive	Negative_X		
OD=.1 change: Aliquot Information 1 x 6.2g in 230ml falc		¥	
(Research Associate)	3-22-13 (date)	(Laboratory Supervisor)	3 /22/2013 (date)

0/600					48hr Minu	8					48hr Ave	8		
48 hr 570/600	0.76	0.78	0.77	1.78	48h	0D.1	0.03	0.04	0.03	1.04	48	00.1	0.03	-
	3-15-13.							Sample		Pos. Cont.			Sample	
	0.73	0.72	0.72	0.74	F	OD.0001	0.00	0.00	-0.01	0.01		OD.0001	0.00	
N	0.72	0.73	0.72	0.75		100. do	0.00	0.00	-0.01	0.02		00.00	-0.01	1
009/0	0.73	0.73	0.72	0.78	24hr Minus Blank	10. do	0.00	0.00	-0.01	0.05	24hr Average	10. do	00.00	
24hr 570/600	0.75	0.75	0.74	1.18	24hr	00.1	0.02	0.03	0.01	0.45	24	1.00	0.02	
	3-14-13.							Sample		Pos. Cont.			Sample	
								1						
	0.71	0.70	0.70	0.72		OD.0001	0.00	00.00	-0.01	0.01		OD.0001	0.00	***
	0.71	0.71	0.71	0.71	×	100. do 10. do	0.01	0.00	0.00	0.00		OD .001	0.00	000
20/600	0.71	0.71	0.70	0.71	Initial Minus Blank	10. do	00.00	0.00	0.00	0.00	Initial Average	10. do	0.00	000
Initial 0 hr 570/600	0.72	0.72	0.72	0.75	Initial	00.1	0.02	10.0	10.0	0.04	Init	00.1	0.01	0.04
	3-13-13.	13.Rv.2.1.17.4.WCg.Hyp						Sample		Pos. Cont.			Sample	Day Carl

 Sample .1
 Sample .01
 Pos .1

 0
 0.01
 0.00
 0.04

 24
 0.02
 0.00
 0.44

 48
 0.03
 0.00
 1.0

	0.73	0.74	0.73	0.76		OD.0001	-0.01	0.00	-0.01	0.02		OD.0001	-0.01	0.02
	0.74	0.74	0.73	0.76	~	0D .001	0.00	0.01	0.00	0.03		0D.001	0.00	0.03
009/0	0.74	0.74	0.73	0.85	48hr Minus Blank	10.00	0.00	0.01	-0.01	0.11	48hr Average	10. do	00'0	0.11
48 hr 570/600	0.76	0.78	0.77	1.78	48hr	00.1	0.03	0.04	0.03	1.04	48	00.1	0.03	1.04
	3-15-13.							Sample		Pos. Cont.			Sample	Pos. Ctrl.
	0.73	0.72	0.72	0.74		OD.0001		0.00	-0.01	0.01		OD.0001	0.00	0.01
	0.72	0.73	0.72	0.75	k	100. do	0.00	0.00	-0.01	0.02		OD .001	-0.01	0.02
	0.73	0.73	0.72	0.78	24hr Minus Blank	10. do	0.00	000	-0.01	0.05	24hr Average	10. do	0.00	0.05
24hr 570/600					Min	0					Jr A	9		

	·· • · · Sample .1	Pos.1	Linear (Sample .01) ————————————————————————————————————		y = 0.0208x + 0.0125 y = 0.0024x - 0.0037	y = 0.0004x + 0.0121	y = -2E-05x - 0.0011	
		2					09	
ø.	4					•	92	
570/600 vs Time					1		40	
57		1				1	30	Hours after setup
		ī					20	
				\			10	
1.20	6	1	0.80	0.40	0.20	0000	0	-0.20

### WORK SHEET FOR $\gamma$ -IRRADIATED CELLS

General Information			
Lot Number:13.Rv.2.1 Species: M. tuberculosis Strain: H37Rv	.17.4.WCg.Normoxic		
Growth Conditions:	Medium: GAS # of Fermentors: 1 Inoculation Date: 1.17.13 SOP # used for Harvest: PP0040	Harvest Date:1.24.13 0 1/11/13 version	
Wet Weight: 8.8g	=		
Date irradiated: 2.18.13	Ву: <u>ЈВ</u>		
Alamar Blue QC Inform	aation		
Date Started: <u>2.28.13</u>	Date Checked: 3.2.13		
Positive Control: Positive	X Negative		
OD = .1 change:	0.0728		
Sample: Positive1	Negative_X		
OD=.1 change: 0 Aliquot Information 1 x 8.8g in 230ml falco			
(Research Associate)	3-7-13 (date)	(Laboratory Supervisor)	(date)

OD Ave	24hr 570/600 24hr 570/600 3-1-13. 0.82 0.76 0.76 0.73 8 24hr Min 0.01 0.05 1.00 Pos. Cont. 1.48 0.05 24hr Allin 0.05	14   00.001   00.0001	S70/600   S4h   S4h		0.72 0.71 0.71	0.71	0.71 0.70 170	0.61 0.68 0.67	0.80 0.72 0.70		s Blank	01 OD .001 OD.0001	0.01 0.00 0.00	0.00 0.00 -0.01	0.09 0.01 -0.01	rage	01 OD.001 OD.0001	-0.03 -0.01 -0.01	100
000000000000000000000000000000000000000	[0]4000	70 0.77 0.82   1.09   1.09   1.09   1.09   1.09   1.09   1.09   1.09   1.09   1.09   1.09   1.09   1.09   1.09   1.09   1.00   1	70 0.77 0.82 (67 0.74 0.74 0.74 0.74 0.74 0.74 0.74 0.7	24hr 570/600	0.82	0.82					24hr Minu	H		0.05	 1.48	24hr Ave		90.0	Doe Ctel
		#	0 hr 570 0.78 0.05 0.05 0.05 0.01 0.01 0.03		0.77	0.77	0			- 1	200	90					90		0

Pos .01 3 -0.03 8 0.09

0.03

 Sample .1
 Sample .01
 Pos .1

 0
 0.00
 0.10
 0.00

 24
 0.06
 -0.03
 1.44

 48
 0.11
 -0.11
 3.5;

0 42 84

	• - · Sample .1	Sample .01	<b>▲</b> Pos.1	— • — Pos .01	· · · · · · Linear (Sample .1)	· · · · · · Linear (Sample .01)	——— Linear (Pos .1)	Linear (Pos.01)			y = 0.0728x - 0.0674	y = 0.0039x - 0.017	y = 0.0022x + 0.0029		$\gamma = -0.0045x + 0.0954$
		1											中心人工工工工工工工工工工工工工工工工工工工工工工工工工工工工工工工工工工工工	10 20 30 40 60	Hours after setup
700		3.50		3.00		2.50			ogs19vA nn003\r	1.50 1.50	1.00	0.50	000	o	-0.50