

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 62414041	14.Rv.2.2.17.4.WCg.Hypoxic	12MAR2014
M. tuberculosis, Strain H37Rv, Irradiated Cells (normoxic culture)	NR-36494 lot 62414046	14.Rv.2.2.17.4.WCg.Normoxic	12MAR2014

Lot: 62761397

Production and QC testing were performed by Colorado State University (CSU). The CSU documentation for bulk lots 14.Rv.2.2.17.4.WCg.Hypoxic and 14.Rv.2.2.17.4.WCg.Normoxic is attached. The kit was assembled by BEI Resources on 16JUL2014.

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WORK SHEET FOR γ-IRRADIATED CELLS

General Information Lot Number: __14.Rv.2.2.17.4.WCg.Hypoxic Species: M. tuberculosis Strain: H37Rv Growth Conditions: Medium: GAS # of Fermentors: 1 (4L) Inoculation Date: 2.17.14 Harvest Date: 3.3.14 SOP # used for Harvest: PP0040 1/11/13 version Wet Weight: 33.0g Date irradiated: 3.12.14 By: IC Alamar Blue QC Information Date Started: 4.16.14 Date Checked: 4.18.14 Positive Control: Positive X Negative OD = .1 change: 0.0862 Sample: Positive ____ Negative __X___ OD=.1 change: 0.0013 **Aliquot Information** 1 x 33.0g in 230ml falcon tube See graph for dissolved oxygen (DO) log.

(Laboratory Supervisor)

(Research Associate)

48 hr 570/600	92.0	92.0	92.0	1.98	48hr Minus Blank	100. dO 10. dO	10:01	0.01	0.01	1.23	Aohr Assessed	- 1	100. OD 10. OD	10:0 80
48 hr	0.83	0.83	0.83	4.92	14	1. do	0.08	90.08	0.08	4.17			0D.1	0.08
	4-18-14.				L			Sample		Pos. Cont.				Sample
	0.74	0.74	0.74	0.74		OD.0001	0.00	0.00	0.00	0.00			OD.0001	0.00
	0.74	0.74	0.74	0.81		100. do	0.00	0.00	0.00	0.07			0D .001	0.00
,600	0.75	0.74	0.75	1.20	24hr Minus Blank	10. do	0.01	0.00	0.01	0.46	A A	Z4UL Average	0D .01	0.01
24hr 570/600	62.0	62.0	62.0	4.37	24hr	1.00	0.05	0.05	0.05	3.63	400	147	00.1	90.0
	4-17-14.							Sample		Pos. Cont.				Sample
	0.74	0.72	0.72	0.73		OD.0001	0.01	-0.01	-0.01	00.00			OD.0001	0.00
	0.72	0.72	0.72	0.72		100. do	-0.01	-0.01	-0.01	-0.01			0D .001	-0.01
	0.74	0.74	0.73	0.72	Initial Minus Blank	10. do	0.01	0.01	00.00	-0.01	4	nitial Average	10. do	0.01
009/02	2	0.74	0.75	0.76	Initial	0D .1	0.02	0.01	0.02	0.03		INIT	00.1	0.02
Initial 0 hr 570/600	0.75			\vdash		H		01		نا				
Initial 0 hr 570/600	4-16-14. 0.7	14. Rv. 2. 17. 4. WCg. Hypox			L			Sample	10	Pos. Cont.				Sample

		60 y = 0.0013x + 0.0193 y = 2E-05x + 0.0082
	11 11 11	95
rime		40
570/600 vs Time		30 40 Hours after setup
		20
	11 11 11 11	10
	Average S70nm/600nm-8lank	0000

WORK SHEET FOR $\gamma\text{-}IRRADIATED$ CELLS

General Information			
Lot Number:14.Rv.2.2 Species: <u>M. tuberculosis</u> Strain: <u>H37Rv</u>	2.17.4.WCg.Normoxic		
Growth Conditions:	Medium: GAS # of Fermentors: 1 (4L) Inoculation Date: 2.17.14 Harvest Date SOP # used for Harvest: PP0040 1/11		
Wet Weight: 55.5g	_		
Date irradiated: 3.12.14	By: <u>IC</u>		
Alamar Blue QC Inform	nation		
Date Started: 4.16.14	Date Checked: 4.18.14		
Positive Control: Positive	X Negative		
OD =.1 change:	0.0862		
Sample: PositiveN	Negative_X		
OD=.1 change: 0	0.0061		
Aliquot Information			
1 x 55.5g in 230ml falc	con tube		
See graph for dissolved of	oxygen (DO) log.		
(Research Associate)	<u>4-2119</u> (date) (Lat	oratory Supervisor)	4/22/20/9 (date)

Continue	24hr 570/600 0.88	OD-0001 Sample OD-001 OD-0001 OD-0001 OD-001 OD-0001 OD-0001 OD-0001 OD-0001 OD-0001 OD-0001 OD-0001	0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.74 0.74 0.74 0.74 0.74 0.74 0.74 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.74 0.74 0.74 0.74 0.74 0.74 0.74 0.74 0.74 0.74 0.74 0.74 0.74 0.74 0.72 0.07 0.00	1	10	Sample Color Col
24hr 570/600 0.88 0.076 0.87 0.87 0.87 0.87 0.87 0.74 0.7	24hr 570/600 0.88	OD-0001 Sample OD-001 OD-0001 OD-0001 OD-001 OD-0001 OD-0001 OD-0001 OD-0001 OD-0001 OD-0001 OD-0001	0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.74 0.74 0.74 0.74 0.74 0.74 0.74 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.74 0.74 0.74 0.74 0.74 0.74 0.74 0.74 0.74 0.74 0.74 0.74 0.74 0.74 0.72 0.07 0.00	Sample Color Col	1	10 10 10 10 10 10 10 10
24hr 570/600 0.88 0.76 0.74 0.74 0.87 0.76 0.74 0.74 0.87 0.76 0.74 0.74 4.37 1.20 0.81 0.74 0.0.1 0.0.1 0.001 0.0001 0.14 0.02 0.00 0.00 t. 3.63 0.46 0.07 0.00 24hr Average 0.0.1 0.0.01 0.0.000 1. 3.63 0.46 0.07 0.00 24hr Average 0.0.1 0.0.01 0.0001 24hr Average 0.0.1 0.0.01 0.0001 25an	24hr 570/600 0.88 0.76 0.74 0.74 0.87 0.76 0.74 0.74 4.37 1.20 0.81 0.74 0.0.1 0.0.1 0.001 0.0001 0.14 0.02 0.00 0.00 t. 3.63 0.46 0.07 0.00 1. 3.63 0.46 0.07 0.00 24hr Average 0.13 0.02 0.00 0.00 24hr Average 0.0.1 0.0.01 0.0.001 0.0001 24hr Average 0.0.1 0.0.01 0.0.001 0.0001 24hr Average 25hr 36 0.00 0.000 1. 3.63 0.00 0.000 25hr 30 0.00 0.000	0.72 0.73 0.73 0.73 0.73 0.73 0.74 0.75 0.75 0.75 0.75 0.75 0.75 0.75 0.75	0.72 0.72 0.73 0.74 0.84 0.74 0.74 0.74 0.74 0.74 0.74 0.74 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.72 0.74	24hr 570/600 24hr	24hr 570/600 24hr	10 10 10 10 10 10 10 10
24hr 570/600 2.8H 0.76 0.74 0.8F 0.76 0.74 0.87 0.76 0.74 0.87 0.76 0.74 2.4hr Minus Blank 0.01 0.02 0.00 0.14 0.02 0.00 0.13 0.02 0.00 24hr Average 24hr Average 0.01 0.00 0.10 1.00 0.1 0.00 1.00 0.11 0.00 1.00 0.12 0.00 1.00 0.13 0.02 0.00 1.00 0.13 0.02 0.00 1.00 0.13 0.02 0.00	24hr 570/600 2.8H 0.76 0.74 0.8F 0.76 0.74 0.87 0.76 0.74 0.87 0.76 0.74 2.4hr Minus Blank 0.01 0.02 0.00 0.14 0.02 0.00 0.13 0.02 0.00 24hr Average 1.00 0.1 0.00 0.00 1.00 0.13 0.02 0.00 0.13 0.02 0.00 0.13 0.02 0.00 0.13 0.02 0.00	OD-0001 OD-001	0.72 0.74 0.76 0.74 0.72 0.74 0.72 0.74 0.72 0.74 0.72 0.74 0.72 0.74 0.72 0.74 0.72 0.70 0.74 0.72 0.70 0.74 0.72 0.70 0.74 0.72 0.70 0.74 0.72 0.70 0.74 0.72 0.70 0.74 0.72 0.70 0.74 0.72 0.70 0.74 0.72 0.70 0.74 0.72 0.70 0.74 0.72 0.70 0.74 0.72 0.70 0.74 0.75 0.70 0.74 0.75 0.70 0.74 0.75 0.70 0.74 0.75 0.70 0.74 0.75 0.70 0.74 0.75 0.70 0.74 0.75	24hr 570/600 24hr	24hr 570/600 24hr	10 12 12 12 12 13 14 15 15 15 15 15 15 15
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0.75 0.75	0.76	0.75 0.75	0.30	100	OD:	0.01 0.00	0.00 0.00		OD .001 OD.0001	0.00 0.00			• · Sample .1	sample .01	os .01	· · · · · Linear (Sample .1)	Linear (Pos.1)	Linear (Pos. 01.)		y = 0.0862x + 0.5421		v = 0.0061x - 0.0029	y = 0.0009x - 0.0079
		1.98	00:	48hr Minus Blank	3		1.23	48hr Average	10. do	0.03			•	Î	- 🖷 — Pos .01	3 5	1	IT nos con con		, ,			*
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4-18-14.						Sample	Pos. Cont.			Sample Pos. Ctrl.													
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0.74	0.74	0.74		OD 0001	0.00	000	0.00		OD.0001	0.00				\bigvee					# # # # # # # # # # # # # # # # # # #				
0.74	0.74	0.81	П	0D .001		000	0.07		0D .001	0.00		Je			\setminus					l l		40	
0.76	0.76	1.20	10	24nr Minus Blank		0.02	0.46	1000	00 .01			570/600 vs Time			/					11 11 11			
0.88	0.87	4.37	2465	0D.1	0.14	0.13	3.63		00.1			570/60				/	\					30	Hours after setup
4-17-14.					Sample		Pos. Cont.		Samula	Pos. Ctrl.					1			\		11	*		Hou
																/	\					20	
0.73	0.72	0.73		OD.0001	0.01	-0.01	0.00	10000	-0.01	0.00										11			
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0.72	0.73	0.76	Initial	0D.1	-0.01	0.00	0.03	Initia OD 1	1g		Sample .01 Pos .1 -0.01 0.03 0.03								\		11		
4.WCg.Norm					Sample		Pos. Cont.		Sample	os. Ctrl.	0.00 0.13 0.30	5.00		4.00			3.00	Ansile-mn000/mn072	1.00	•	00:00	0	-1.00