Mycobacterium tuberculosis, Strain HN878, Gamma-Irradiated Whole Cells

Catalog No. NR-14821

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Product Description: *Mycobacterium tuberculosis* (*M. tuberculosis*), strain HN878, was grown to late-log phase in glycerol-alanine-salts medium and inactivated by exposure to 2.4 mRads of ionizing gamma irradiation using a ^{137}Cs source. Confirmation of inactivation was performed by Alamar Blue assay. A dose of 2.4 mRads of gamma irradiation kills *M. tuberculosis* to a 10^{20} degree of certainty while maintaining 93% to 95% of the biological activity of the enzymes.

Lot: 62325994   **Manufacturing Date: 15NOV2013**

Production and QC testing were performed by Colorado State University (CSU). The CSU documentation for bulk lot 13.HN878.10.15.9.WCg.a is attached.

WORK SHEET FOR γ-IRRADIATED CELLS

General Information

Lot Number: __13.HN878.10.15.9.WCg.a__
Species: _M. tuberculosis_
Strain: _HN878_

Growth Conditions: Medium: _____GAS___
# of Fernbachs: __16___   # of Roller bottles: _0_
Inoculation Date: _10.15.13_____   Harvest Date: ___10.29.13_
SOP # used for Harvest: __PP003.3 1/11/13 version__

Wet Weight: ____89.8g___

Date irradiated: __11.15.13_ By: _IC_

Alamar Blue QC Information

Date Started: _12.4.13_   Date Checked: _12.6.13_

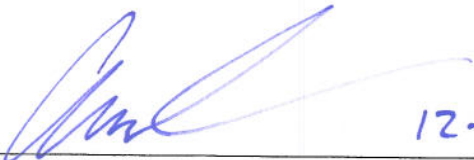Positive Control: Positive___X___ Negative_____

OD =.1 change: 0.0094
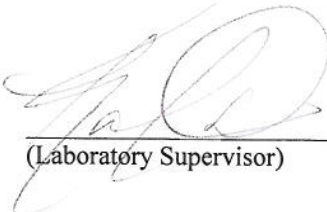
Sample: Positive_____ Negative__X____

OD=.1 change: 0.0002

Aliquot Information
1 x   89.8g in 230ml falcon tube

_____   12.9-13
(Research Associate)   (date)

_____   12/11/2013
(Laboratory Supervisor)   (date)

Initial 0 hr 570/600

raw	12-4-13.			
13.HN878.10.15.9.WCg.a	0.83	0.75	0.77	1.01
	0.82	0.91	0.84	0.82
	0.81	0.92	0.86	0.85
	0.79	0.90	0.82	0.58

Initial Minus Blank

	OD .1	OD .01	OD .001	OD .0001
Sample	0.01	-0.07	-0.05	0.18
	0.00	0.08	0.01	0.00
	-0.01	0.10	0.03	0.03
Pos. Cont.	-0.04	0.08	-0.01	-0.25

Initial Average

	OD .1	OD .01	OD .001	OD .0001
Sample	0.00	0.03	0.00	0.07
Pos. Ctrl.	-0.04	0.08	-0.01	-0.25

24 hr 570/600

	12-5-13.			
	0.76	0.63	0.67	0.72
	0.75	0.68	0.67	0.74
	0.73	0.67	0.66	0.72
	1.37	0.88	0.91	1.11

24hr Minus Blank

	OD .1	OD .01	OD .001	OD .0001
Sample	-0.05	-0.17	-0.13	-0.08
	-0.06	-0.12	-0.14	-0.07
	-0.07	-0.14	-0.15	-0.09
Pos. Cont.	0.57	0.07	0.10	0.30

24hr Average

	OD .1	OD .01	OD .001	OD .0001
Sample	-0.06	-0.15	-0.14	-0.08
Pos. Ctrl.	0.57	0.07	0.10	0.30

48 hr 570/600

	12-6-13.			
	0.96	0.92	0.93	
	0.94	0.92	0.93	
	0.90	0.89	0.93	
	0.95	0.93	1.03	1.34

48hr Minus Blank

	OD .1	OD .01	OD .001	OD .0001
Sample	0.01	0.00	0.00	0.04
	0.01	0.00	-0.01	0.01
	0.00	-0.04	-0.04	-0.03
Pos. Cont.	0.41	0.10	0.01	0.03

48hr Average

	OD .1	OD .01	OD .001	OD .0001
Sample	0.00	-0.01	-0.02	0.01
Pos. Ctrl.	0.41	0.10	0.01	0.03

	Sample .1	Sample .01	Pos .1	Pos .01
0	0.00	0.03	-0.04	0.08
24	-0.06	-0.15	0.57	0.07
48	0.00	-0.01	0.41	0.10

570/600 vs Time

Legend:
- Sample .1
- Sample .01
- Pos .1
- Pos .01
- Linear (Sample .1)
- Linear (Sample .01)
- Linear (Pos .1)
- Linear (Pos .01)

$y = 0.0094x + 0.0907$

$y = 0.0006x + 0.0692$

$y = 0.0002x - 0.0233$

$y = -0.001x - 0.0179$

X-axis: Hours after setup

Y-axis: Average 570nm/600nm-Blank