Mycobacterium tuberculosis, Strain HN878, Gamma-Irradiated Whole Cells

Catalog No. NR-49100

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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: 70005745   **Manufacturing Date: 13JUL2017**

Production and QC testing were performed by Colorado State University (CSU). The CSU documentation for bulk lot 17.HN878.5.24.9.WCg.b is attached. Each vial contains 1 g *M. tuberculosis*, strain HN878 gamma-irradiated whole cells.

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WORK SHEET FOR γ-IRRADIATED CELLS

General Information

Lot Number: ___17.HN878.5.24.9.WCg.b___
Species: M. tuberculosis
Strain: HN878

Growth Conditions: Medium:_____GAS____
                          # of Fernbachs: __16____   # of Roller bottles: 0
                          Inoculation Date: 5.24.17 Harvest Date: __6.7.17__
                          SOP # used for Harvest: __PP003.3_____

Wet Weight:___65.2g____

Date irradiated: _7.13.17_ By: AS

Alamar Blue QC Information

Date Started: 7.10.17   Date Checked: 7.12.17

Positive Control: Positive___X___ Negative_____

Sample: Positive_____ Negative__X____

Aliquot Information

1 x   65.2g in 230ml falcon tube

_____ C 7.14-17   C. Mchaffy   7-18-17
(Research Associate)   (date)   (Laboratory Supervisor)   (date)

Initial 0 hr 570/600

raw	7-10-17.			
17.HN878.5.24.9.WCg.b	0.76	0.71	0.70	0.70
	0.76	0.71	0.71	0.70
	0.76	0.71	0.71	0.70
	0.75	0.72	0.72	0.71

Initial Minus Blank

	OD .1	OD .01	OD .001	OD.0001
Sample	0.05	0.00	-0.01	-0.01
	0.05	0.00	0.00	-0.01
	0.05	0.00	0.00	-0.01
Pos. Cont.	0.04	0.01	0.01	0.00

Initial Average

	OD .1	OD .01	OD .001	OD.0001
Sample	0.05	0.00	0.00	-0.01
Pos. Ctrl.	0.04	0.01	0.01	0.00

	Sample .1	Sample .01	Pos .1	Pos .01
0	0.05	0.00	0.04	0.01
24	0.07	0.00	2.53	0.18
48	0.09	0.00	2.14	0.39

24 hr 570/600

	7-11-17.			
	0.83	0.76	0.75	0.75
	0.83	0.76	0.75	0.75
	0.83	0.76	0.75	0.75
	3.29	0.94	0.77	0.76

24hr Minus Blank

	OD .1	OD .01	OD .001	OD.0001
Sample	0.07	0.00	-0.01	-0.01
	0.07	0.00	-0.01	-0.01
	0.07	0.00	0.01	-0.01
Pos. Cont.	2.53	0.18	0.01	0.00

24hr Average

	OD .1	OD .01	OD .001	OD.0001
Sample	0.07	0.00	0.00	-0.01
Pos. Ctrl.	2.53	0.18	0.01	0.00

48 hr 570/600

	7-12-17.			
	0.86	0.78	0.77	0.77
	0.86	0.78	0.77	0.77
	0.86	0.78	0.77	0.77
	2.92	1.16	0.80	0.78

48hr Minus Blank

	OD .1	OD .01	OD .001	OD.0001
Sample	0.09	0.00	-0.01	-0.01
	0.09	0.00	0.00	-0.01
	0.09	0.00	0.00	-0.01
Pos. Cont.	2.14	0.39	0.02	0.00

48hr Average

	OD .1	OD .01	OD .001	OD.0001
Sample	0.09	0.00	0.00	-0.01
Pos. Ctrl.	2.14	0.39	0.02	0.00

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)

$y = 0.0437x + 0.5224$

$y = 0.0078x + 0.0055$

$y = 0.0007x + 0.0509$

$y = 3E\text{-}05x - 8E\text{-}05$

X-axis: Hours after setup

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