Certificate of Analysis for NR-14821

Mycobacterium tuberculosis, Strain HN878, Gamma-Irradiated Whole Cells

Catalog No. NR-14821
This reagent is the tangible property of the U.S. Government.

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: 61977655 **Manufacturing Date: 18OCT2013**

Production and QC testing were performed by Colorado State University (CSU). The CSU documentation for bulk lot 13.HN878.9.17.7.WCg is attached.

Support Provided by NIAID

BEI Resources
www.beiresources.org
E-mail: contact@beiresources.org
Tel: 800-359-7370
Fax: 703-365-2898

WORK SHEET FOR γ-IRRADIATED CELLS

General Information

Lot Number: 13.HN878.9.17.7.WCg
Species: M. tuberculosis
Strain: HN878

Growth Conditions: Medium: GAS
# of Fernbachs: 8 # of Roller bottles: 0
Inoculation Date: 9.17.13 Harvest Date: 10.1.13
SOP # used for Harvest: PP003.3 1/11/13 version

Wet Weight: 63.2g

Date irradiated: 10.18.13 By: IC

Alamar Blue QC Information

Date Started: 10.30.13 Date Checked: 11.1.13

Positive Control: Positive X Negative

OD =.1 change: 0.0437

Sample: Positive Negative X

OD=.1 change: 0.0012

Aliquot Information

1 x 63.2g in 230ml falcon tube

11-4-13
(Research Associate) (date)

11/4/2013
(Laboratory Supervisor) (date)

Initial 0 hr 570/600					
raw	10-30-13.	0.95	0.77	0.91	0.86
13.HN878.9.17.7.WCg		0.97	0.95	0.91	0.96
		0.91	0.91	0.90	0.91
		0.90	0.89	0.93	0.91

24hr 570/600					
	10-31-13.	0.97	1.12	1.14	1.13
		0.96	1.07	1.08	1.09
		0.95	1.03	1.04	1.05
		1.63	1.11	1.02	1.00

48 hr 570/600					
	11-1-13.	0.96	0.92	0.87	0.86
		0.94	0.88	0.85	0.84
		0.95	0.88	0.87	0.85
		2.95	1.29	0.89	0.84

Initial Minus Blank				
	OD .1	OD .01	OD .001	OD.0001
Sample	0.02	-0.16	-0.02	-0.07
	0.03	0.01	-0.02	0.03
	-0.02	-0.02	-0.03	-0.01
Pos. Cont.	-0.03	-0.04	0.00	-0.02

24hr Minus Blank				
	OD .1	OD .01	OD .001	OD.0001
Sample	-0.04	0.11	0.13	0.13
	-0.05	0.06	0.07	0.08
	-0.06	0.03	0.03	0.03
Pos. Cont.	0.63	0.11	0.01	-0.01

48hr Minus Blank				
	OD .1	OD .01	OD .001	OD.0001
Sample	0.08	0.03	-0.01	-0.02
	0.06	-0.01	-0.03	-0.04
	0.07	-0.01	-0.02	-0.01
Pos. Cont.	2.07	0.41	0.01	-0.04

Initial Average				
	OD .1	OD .01	OD .001	OD.0001
Sample	0.01	-0.05	-0.02	-0.02
Pos. Ctrl.	-0.03	-0.04	0.00	-0.02

24hr Average				
	OD .1	OD .01	OD .001	OD.0001
Sample	-0.05	0.06	0.08	0.08
Pos. Ctrl.	0.63	0.11	0.01	-0.01

48hr Average				
	OD .1	OD .01	OD .001	OD.0001
Sample	0.07	0.01	-0.02	-0.03
Pos. Ctrl.	2.07	0.41	0.01	-0.04

	Sample .1	Sample .01	Pos .1	Pos .01
0	0.01	-0.05	-0.03	-0.04
24	-0.05	0.06	0.63	0.11
48	0.07	0.01	2.07	0.41