

Cow
Sera
Lansing
(QUAL.)

Test for Lansing Antiviral Activity in Cow Sera.

Serum tested	Date of test	Log of final dilution of virus in mixture					log LD ₅₀	Neutraliz. index
		1.6	2.3	3.0	4.0	5.0		
VIRUS	7-24-50	.....	20/20	20/20	13/20	4/20	4.4	
CONTROL	8-1-50	8/8	8/8	5/8	2/8	...	3.4	
SALINE	8-2-50	8/8	8/8	8/8	5/8	...	4.2	
	Cumulat.	16/16	36/36	33/36	20/36	4/20	4.1	
V.M. Cow 1	8-1-50	4/8	0/8	0/8	.....	.....	1.6	320
" " 2	"	4/8	1/8	0/8	.....	.....	1.7	250
" " 3	"	2/8	1/7	0/8	.....	.....	1.4	500
" " 4	"	1/8	0/8	2/8	.....	.....	1.4	500
" " 5	"	5/8	1/8	0/8	.....	.....	1.8	200
" " 6	"	6/8	2/8	3/8	.....	.....	2.1	100
" " 7	"	7/8	7/8	4/8	.....	.....	2.8	20
" " 8	"	2/7	3/8	0/8	.....	.....	1.6	320
Col " " 9	"	2/8	0/8	1/7	.....	.....	1.4	500
S. Cow 1-7 ^{yr}	8-2-50	8/8	4/8	1/8	.....	.....	2.4	50
Col " " 7-3 ^{yr}	"	2/8	2/8	1/8	.....	.....	1.5	400
Col " " 9-3 ^{yr}	"	4/8	0/8	0/8	.....	.....	1.6	320
Woke " " 10-3 ^{yr}	"	2/8	2/8	0/8	.....	.....	1.5	400
Col " " 11-7 ^{yr}	"	2/8	2/8	0/8	.....	.....	1.5	400
Col " " 12-2 1/2	"	4/8	1/8	2/8	.....	.....	1.8	200
Col " " 13-6 ^{yr}	"	6/8	3/8	2/8	.....	.....	2.2	80
Col " " 14-3 ^{yr}	"	5/8	4/8	0/8	.....	.....	2.0	125

6 yrs old

BAP RECORD OF [REDACTED]
 COW SERA USED IN TEST 8/1/50

AUG 1 1950

<u>V.M.COW SERA OF 7/24</u>	<u># of COLONIES</u>	<u>COMMENT</u>
# 1	0	5 streaks
# 2	0	"
# 3	0	"
# 4	0	"
# 5	8	large white glistening colonies. 2 small, white molds
# 6	0	5 streaks
# 7	0	"
# 8	0	"
# 9	0	"

AUG 1 1950

MORTALITY

VIRUS NO. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35

SPECIMEN

1 - P P P O
 2 - P P P O
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A

V.M. COW
 # 1-7/24
 SERUM

LANSING

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B

V.M. COW #2
 SERUM 7/24
 LANSING

D
 P P P O
 P P P O

AUG 1 1950

MORTALITY

Virus No 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35

E

V.M. cow #5
SERUM 7/29
+
LANSING

1/40

1/200

10-3

F

V.M. cow #6
SERUM 7/29
+
LANSING

1/40

10-21
21 day
N.S.
1

PPD

PPD

PPD

? 0

PPD

PPD

PPD

AUG 1 1950

MORTALITY

SPECIMEN VIRUS No 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35

F
(CONT)

V.M. cow #6
SERUM 7/24
+
LANGSING

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G

V.M. cow #7
SERUM 7/24
+
LANGSING

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G

V.M. cow #7
SERUM 7/24
+
LANGSING

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BAP RECORD OF SMOEDER
COW SERA USED IN TEST 8/2/50

AUG 2 1950

S. COW SERA OF 7/26

OF COLONIES

COMMENT

1

2

1 mold
1 hem. *Staph. albus*

7

0

5 tent

9

0

"

10

0

"

11

0

"

12

0

"

13

0

"

14

0

"

AUG 2 1950

MORTALITY 4050

SPECIMEN VIRUS NO. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35

I

CONTROL

SALINE + LANSING

1 - D
2 - D
3 - ? PP D
4 - ? P D
5 - ? P D
6 - ? ? ?
7 - ? - CNS D
8 - ? P P P P D
9 - ? - CNS P D

1 - P P P P D
2 - ? - P P P P D
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35 - ? - P P P P D

1 - D
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35 - ? P P P P D

1 - P D
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1 - ? CNS D
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35 - ? CNS D

SUMMARY OF TEST OF DECEMBER 15, 1950

QUALITATIVE TEST FOR LANSING ANTIBODIES IN POOL OF COW SERA FROM V.M. COWS # 1, 3, 4, 8, 9 (9/24/50)

SPECIMEN	MORTALITY AT INDICATED FINAL DILUTION OF VIRUS					LD ₅₀	NEUTRALIZING INDEX
	1:3	1:7	2	3	4		
POOL OF COW SERA FROM V.M. COWS # 1, 3, 4, 8, 9	2/10	-	0/10	0/10	-	1.2	800
CONTROL	-	10/10	10/10	9/10	6/10	4.1	

QUALITATIVE TEST FOR LANSING ANTIBODIES IN
POOL OF COW SERA FROM V.M. COWS # 1, 3, 4, 8, 9 (7/24/50)

PURPOSE: To determine the neutralizing index of this pool against Lansing virus at the same time that this pool is being tested in monkeys against monkey passage of Lansing virus.

VIRUS: Lansing virus: Pool I of 616/50. 10% suspension in saline. Centrifuged 10 minutes at 2000 rpm to remove flocculent ppt.

PROCEDURE: 0.2 ml of undiluted sera was added to 0.2 ml of 1:10, 1:50, 1:500 dilutions of Lansing virus in saline giving final dilutions of virus of 1:20, 10^{-2} , 10^{-3} . The controls consisted of 1:50, 10^{-2} , 10^{-3} , 10^{-4} dilutions of virus in saline. Tubes were shaken and incubated at room temperature for 1 hour. Tubes were placed in an ice bath during inoculation.

MICE: 18-20 gram Maxfields ♂ per dilution

<u>CODE</u>	<u>SPECIMEN</u>	1:20	1:50	10^{-2}	10^{-3}	10^{-4}
A	POOL OF COW SERA V.M. COWS #1, 3, 4, 8, 9 7/24/50	2/10		0/10	0/10	
B	CONTROL		10/10	10/10	9/10	6/10

SPECIMEN VIRUS NO. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35

LD50

10^{-4.1}

B

10/10

CONTROL

SALINE

+

LANSING

10/10

9/10

1:50

10⁻²

10⁻³

1 - D

2 - D

3 - D

4 - D

5 - D

6 - PP D

7 - PPP D

8 - ? P D

9 - -

10 - -

1 - D

2 - D

3 - D

4 - PP D

5 - PP PR D

6 - ? ? ? P P D

7 - -

8 - -

9 - -

10 - -

1 - PP D

2 - P D

3 - ? P D

4 - ? P D

5 - -

6 - -

7 - -

8 - -

9 - -

10 - -

PP P D

PP PR D

PP PR D

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APR 16 1951

LD50

1:48

MORTALITY

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33

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SPECIMEN B VIRUS No. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 MORTALITY 6050

10/10

10/10

1:300

1:300

1 - D
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CONTROL
SALINE
+

LANSING

E^w E^w D

QUANTITATIVE TEST FOR LANSING ANTIBODIES IN
POOL OF COW'S SERUM (V.M. COWS #1, 3, 4, 8, 9)

PURPOSE: To determine the titer of activity of the antiserum factor against 50 PD₅₀ of virus.

VIROS: Lansing virus: Pool II of 2/5/51. 10% suspension in saline. Centrifuged 10 minutes at 2000 rpm to remove flocculent ppt.

PROCEDURE: The serum was diluted serially in four fold dilutions undiluted, 1:4, 1:16, 1:64. To 0.5 ml of each dilution 0.5 ml of 50 PD₅₀ of Lansing virus was added so that the final dilution of virus was 1:300. Final dilutions of serum were 1:2, 1:8, 1:32, 1:128. Controls consisted of 1:300 dilution of virus. Mixtures were shaken and incubated at room temperature for 1 hr.

MICE: 18-20 gm Marfield 8 per dilution

<u>CODE</u>	<u>SPECIMEN</u>	1:2	1:8	1:32	1:128
A	POOL OF COW SERA V.M. COWS #1, 3, 4, 8, 9				
B	CONTROL				