

# Library 2, Plate 4

Protein Expression Screening  
Library 2 Plate 4

4/29/15

Plan

## Running SDS-PAGE

4/30/15

1x Buffer

10x Reducing Agent

Bug Buster

1 Rep 40 Rep

5	200
2	80
13	520
20	80

gel 1  $\Rightarrow$  H1, H1<sup>+</sup>, A1  $\rightarrow$  A12, B7, B2

gel 2  $\Rightarrow$  B3  $\rightarrow$  C6.

all induced

samples, except H1  
which is both.

gel #

(+) (+) (+) (+) (+) (+) (+) (+) (+) (+)  
H1, A1, A2, A3, A4, A5, A6, A7, A8, A9, A10, A11, A12  
B1, B2

gel # 2

(+) (+) (+) (+) (+) (+) (+) (+) (+) (+)  
B3, B4, B5, B6, B7, B8, B9, B10, B11, B12, C1, C2, C3, C4, C5  
(+)  
C6.

gel 3

C7  $\rightarrow$  D10

5/1/15

gel 4.

D11  $\rightarrow$  F2.

gel 5

(+) (+) (+) (+) (+) (+) (+) (+) (+) (+)  
C7, C8, 9, 10, 11, 12, D1, D2, D3, 4, 5, 6, 7, 8

(+)

D9, D10

gel # 4;

(+) (+) (+) (+) (+) (+) (+)  
D11, 12, E1, E2, E3, 4, 5, 6, 7, 8, 9, 10, E11, E12

(+)  
F1, F2

lib2 Plate 4

5/4/15

gel 5 <sup>⊕</sup>F3, <sup>⊕</sup>4, <sup>⊕</sup>5, 6, 7, 8, 9, <sup>⊕</sup>10, <sup>⊕</sup>11, F12, G1, G2, 3, 4, 5

G6

gel #6 <sup>⊕</sup>G7, <sup>⊕</sup>8, <sup>⊕</sup>9, <sup>⊕</sup>10, <sup>⊕</sup>11, <sup>⊕</sup>G12, H2, <sup>⊕</sup>H3, <sup>⊕</sup>H4, <sup>⊕</sup>H5, <sup>⊕</sup>H6,  
<sup>⊕</sup>H7, <sup>⊕</sup>H12

A1, A3, A5, A6, A7, A8, A9, A10

A11, B5, B7, B8, B10, B11, B12, C1

C2, C3, C4, C6, C7, C9, C10, ~~C11~~

~~C11~~ D2, D3, D4, D5, D6, D7, D8, ~~D9~~

~~D9~~ D11, E1, E3, E5, E7, E9, E10, ~~E11~~

~~E11~~ F3, F4, F5, F10, F11, G8, G9, ~~G10~~

~~G10~~ G11, G12, H1, H2, H3, H4, H5, ~~H6~~

~~H6~~ H7, H12

Lib2, Plate 4

MFC Amp.

5/5/15

5 plates x 96 = 480 wells.

x 150  $\mu$ l

72 ml.

5 plates x 8 = 40 wells

x 300  $\mu$ l

12 ml

① 100 ml LB media + 100  $\mu$ l Kanamycin (50  $\mu$ g/ $\mu$ l)  
+ 1 ml of 100 mM IPTG (1 mM final)

② Take 15 ml of #1 add  
30  $\mu$ l of 166  $\mu$ g/ $\mu$ l Amp  
~~30 x 4980  $\mu$ g~~ =  $\mu$ g/15 ml  
= 332  $\mu$ g/ml.

1: A1, A3, A5, A6, A7, A8, A9, A10

2: A11, B5, B7, B8, B10, B11, B12, C1

3: C2, C3, C4, C5, C6, C7, C9, C10

4: C11, D2, D3, D4, D5, D6, D7, D8:

5: D9, D11, E1, E3, E5, E7, E9, E10

#6 F1, F3, F4, F5, F10, F11, G8, G9

#7 G11, G12, H1, H2, H3, H4, H5, H6

#8 ~~H8, H12~~, A10, A11, C1, C6

Lib2, Plate 4

5/6/15

MIC - Cephalothin.

- ① 100 ml LB + 100  $\mu$ l Kanamycin + 1 ml of IPTG (of 100 mM)
- ② ~~#1~~ 15 ml #1  
+ 180  $\mu$ l Cephalothin (of 200  $\mu$ g/ $\mu$ l)  
$$\left. \begin{aligned} &= 180 \times 200 \\ &= 36000 \mu\text{g} / \cancel{180} \text{ ml} \\ &= 2400 \mu\text{g}/\text{ml} \end{aligned} \right\}$$

5/7/15

MIC - Ceftazidime.

- ① 100 ml LB + 100  $\mu$ l kana + 1 ml IPTG.
- ② 15 ~~ml~~ ml of #1  
+ 75  $\mu$ l of ceftazidime (of 5  $\mu$ g/ $\mu$ l)  
$$= 375 \mu\text{g} / 15 \text{ ml}$$
$$= \underline{\underline{25 \mu\text{g}/\text{ml}}}$$

Libz, Plate 4

5/12/15

MIC - Amp

- ① 100 ml LB + 100  $\mu$ l Kanamycin + 1 ml IPTG.
- ② 15 ml #1 + 30  $\mu$ l Amp (of 166  $\mu$ g/ml)

MIC - Cephalothin.

- ① 100 ml LB + 100  $\mu$ l Kanamycin + 1 ml IPTG.
- ② 15 ml #1 + 180  $\mu$ l Cephalothin.

- ① F1, F3, F4, F5, F10, F11, G8, G9
- ② G11, G12, H1, H2, H3, H4, H5, H6
- ③ H7, H12, A10, A11, C1, C6.

5/13/15

~~100 ml LB + 100  $\mu$ l Kana + 1 ml IPTG~~

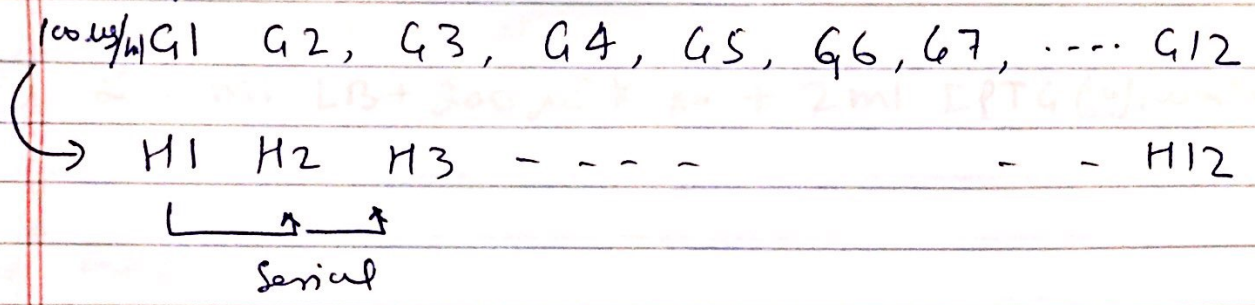
- ① 100 ml LB + 100  $\mu$ l Kana + 1 ml IPTG (of 100 mM)
- ② 15 ml of #1 + 75  $\mu$ l Cefotaxime  
= 375  $\mu$ g / 15 ml  
= 25  $\mu$ g/ml.
- ③ 1 ml of #1 + 10  $\mu$ l of Cefotaxime (of 5  $\mu$ g/ $\mu$ l)  
= 50  $\mu$ g/ml

for clone A

Plate # 3

Well G, H For A10 clone

Serial.



1 ml +

5  $\mu$ g/ml

20  $\mu$ l = 100  $\mu$ g

1 ml LB + 20  $\mu$ l Ceftriaxone

= 20 x 5 = 100  $\mu$ g/ml

Serial ( G1 will have 100  $\mu$ g/ml  $\rightarrow$  50, 25, ...  
 H1 will have 50  $\mu$ g/ml  $\rightarrow$  25, 12.5, ...

Lib 2 Plate 4 Repeat  
MIC

5/19/15

A10, A11, C1, C6, H5, H7

① 200 ml LB + 200  $\mu$ l Kana + 2 ml IPTG (500  $\mu$ M)

For Amp

Amp 1 332  $\mu$ g/ml  $\rightarrow \rightarrow$

Take 3 ml of # 1

add 6  $\mu$ l of 166  $\mu$ g/ $\mu$ l

= ~~332~~ =

996  $\mu$ g total / 3 ml

= 332  $\mu$ g / ml

166  $\mu$ g/ $\mu$ l

2  $\mu$ l

332  $\mu$ g total / ml

Amp 2 664  $\mu$ g/ml  $\rightarrow \rightarrow$

Take 3 ml of # 1

add 12 ml of 166  $\mu$ g/ $\mu$ l

= 1992  $\mu$ g / 3 ml

= 664  $\mu$ g / ml

For Cephalothin 2400  $\mu$ g/ml  $\rightarrow \rightarrow$

Cephalo 1 Take 3 ml of 1

+ 36  $\mu$ l of Cephalo =  $36 \times 180 =$

7200  $\mu$ g / 3 ml

= 2400  $\mu$ g / ml

Cephalo 2 4800  $\mu$ g/ml  $\rightarrow \rightarrow \rightarrow$

Take 3 ml of 1

add 72  $\mu$ l of Cephalo =  $72 \times 60 =$

= 4800  $\mu$ g / ml

5/19/15

For Ceftezidim

Cefta 1 25  $\mu$ g/ml  $\rightarrow \rightarrow$

Take 3ml of #1  
add 15 ~~ml~~  $\mu$ l of Cefta

$$= 15 \times 5 = 75 \mu\text{g}/3\text{ml}$$
$$= 25 \mu\text{g}/\text{ml}$$

Cefta 2 50  $\mu$ g/ml  $\rightarrow \rightarrow$

Take 3ml of #1  
add 30  $\mu$ l of Cefta.

$$= ~~300~~ 30 \times 5 = 150 \mu\text{g}/3\text{ml}$$
$$= 50 \mu\text{g}/\text{ml}$$

Repeat E9 Plasmid isolation.  
F1

A+	A10
B*	A11
C	C1
D	C6
E	H5
F	H7
G	
H	



5/21/15

A10  
A11  
C1  
C6  
H5  
H7

① 100 ml LB  
+ 100  $\mu$ l Kang  
1 mM Final  $\Rightarrow$  + 1 ml IPTG (of 100 mM)

$$\frac{100 \times 1}{100} = 1 \text{ mM}$$

② add 8  $\mu$ l of Amp (166  $\mu$ g/ $\mu$ l) in 1 ml

for 3 ml add 24  $\mu$ l

$$24 \times 166 = 3984 \text{ } \mu\text{g} / 3 \text{ ml}$$

$$= 1328 \text{ } \mu\text{g} / \text{ml}.$$

6 ml LB + 48  $\mu$ l Amp of 166  $\mu$ g/ $\mu$ l

$$= 48 \times 166$$

$$= 7968 \text{ } \mu\text{g} / 6 \text{ ml}$$

$$= 1328 \text{ } \mu\text{g} / \text{ml}$$

Use duplicate

MIC - Amp.

Lib2 Plate 4

Result may 6<sup>th</sup> 2015

AMP	µg/ml	332	166	83	41.5	20.8	10.4	5.18	2.59	1.29	0.64	0.32	0.16
Antibiotic:		Amp											
Date:		5/6/15											
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12
A1	A	-	-	-	-	+	+	+	+	+	+	+	+
A3	B	-	-	-	-	+	+	+	+	+	+	+	+
A5	C	-	-	-	-	+	+	+	+	+	+	+	+
A6	D	-	-	+	+	+	+	+	+	+	+	+	+
A7	E	-	-	-	+	+	+	+	+	+	+	+	+
A8	F	-	-	-	-	+	+	+	+	+	+	+	+
A9	G	-	-	+	+	+	+	+	+	+	+	+	+
A10	H	+	+	+	+	+	+	+	+	+	+	+	+
Antibiotic:		Amp											
Date:		5/6/15											
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12
A11	A	-	+/-	+	+	+	+	+	+	+	+	+	+
B5	B	-	-	-	-	+	+	+	+	+	+	+	+
B7	C	-	-	-	+	+	+	+	+	+	+	+	+
B8	D	-	-	-	-	+	+	+	+	+	+	+	+
B10	E	-	-	-	-	+	+	+	+	+	+	+	+
B11	F	-	-	-	-	+	+	+	+	+	+	+	+
B12	G	-	-	-	-	+	+	+	+	+	+	+	+
C1	H	+	+	+	+	+	+	+	+	+	+	+	+
Antibiotic:		Amp											
Date:		5/6/15											
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12
C2	A	-	-	-	-	+/-	+	+	+	+	+	+	+
C3	B	-	-	-	-	+	+	+	+	+	+	+	+
C4	C	-	-	-	-	+	+	+	+	+	+	+	+
C5	D	-	-	-	-	+	+	+	+	+	+	+	+
C6	E	-	+	+	+	+	+	+	+	+	+	+	+
C7	F	-	-	-	-	+	+	+	+	+	+	+	+
C9	G	-	-	-	-	+/-	+	+	+	+	+	+	+
C10	H	-	-	-	-	-	+	+	+	+	+	+	+

#1

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#2

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#3

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MEC - Amp

Lib 2 Plate 4, Result May 6th 2015

AMP	µg/ml	332	166	83	41.5	20.8	10.4	5.18	2.59	1.29	0.64	0.32	0.16
Antibiotic:		Amp											
Date:		5/6/15											
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12
C11	A	-	-	+	+	+	+	+	+	+	+	+	+
D2	B	-	-	-	-	+	+	+	+	+	+	+	+
D3	C	-	-	-	-	+	+	+	+	+	+	+	+
D4	D	-	-	-	-	+	+	+	+	+	+	+	+
D5	E	-	-	-	-	+	+	+	+	+	+	+	+
D6	F	-	-	+	+	+	+	+	+	+	+	+	+
D7	G	-	-	-	-	+	+	+	+	+	+	+	+
D8	H	-	-	+	+	+	+	+	+	+	+	+	+

#4

AMP	µg/ml	332	166	83	41.5	20.8	10.4	5.18	2.59	1.29	0.64	0.32	0.16
Antibiotic:		Amp											
Date:		5/6/15											
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12
D9	A	-	-	-	-	-	+	+	+	+	+	+	+
D10	B	-	-	-	+	+	+	+	+	+	+	+	+
E1	C	-	-	+	+	+	+	+	+	+	+	+	+
E3	D	-	-	-	-	-	+	+	+	+	+	+	+
E5	E	-	-	-	-	+	+	+	+	+	+	+	+
E7	F	-	-	-	-	+	+	+	+	+	+	+	+
E9	G	-	-	-	-	+	+	+	+	+	+	+	+
E10	H	-	-	-	-	+	+	+	+	+	+	+	+

#5

AMP	µg/ml	332	166	83	41.5	20.8	10.4	5.18	2.59	1.29	0.64	0.32	0.16
Antibiotic:		Amp											
Date:		5/13/15											
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12
F1	A	-	-	-	-	-	+	+	+	+	+	+	+
F3	B	-	-	-	-	-	+	+	+	+	+	+	+
F4	C	-	-	-	-	-	+	+	+	+	+	+	+
F5	D	-	-	-	-	-	+	+	+	+	+	+	+
F10	E	-	-	-	-	+	+	+	+	+	+	+	+
F11	F	-	-	-	-	+	+	+	+	+	+	+	+
G8	G	-	-	-	-	-	+	+	+	+	+	+	+
G9	H	-	-	-	-	+	+	+	+	+	+	+	+

#6

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MIC - Amp

Lib2 Plate 4

Result 5/13/15

AMP	µg/ml	332	166	83	41.5	20.8	10.4	5.18	2.59	1.29	0.64	0.32	0.16
Antibiotic:		Date: 5/13											
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12
G11	A	-	-	-	-	-	-	+	+	+	+	+	+
G12	B	-	-	-	-	-	+	+	+	+	+	+	+
H1	C	-	+	+	+	+	+	+	+	+	+	+	+
H2	D	-	-	+	+	+	+	+	+	+	+	+	+
H3	E	-	-	+	+	+	+	+	+	+	+	+	+
H4	F	-	-	-	+	+	+	+	+	+	+	+	+
H5	G	-	+	+	+	+	+	+	+	+	+	+	+
H6	H	-	+	+	+	+	+	+	+	+	+	+	+

# 7

AMP	µg/ml	332	166	83	41.5	20.8	10.4	5.18	2.59	1.29	0.64	0.32	0.16
Antibiotic:		Date: 5/13											
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12
H7	A	+	+	+	+	+	+	+	+	+	+	+	+
H12	B	-	-	-	-	-	+	+	+	+	+	+	+
A10	C	+	+	+	+	+	+	+	+	+	+	+	+
A11	D	-	-	-	+	+	+	+	+	+	+	+	+
C1	E	+	+	+	+	+	+	+	+	+	+	+	+
C6	F	-	+	+	+	+	+	+	+	+	+	+	+
	G	/		/		/		/		/		/	
	H	/		/		/		/		/		/	

# 8

Repeat

AMP	µg/ml	332	166	83	41.5	20.8	10.4	5.18	2.59	1.29	0.64	0.32	0.16
Antibiotic:		Date: <del>5/13</del>											
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12
	A												
	B												
	C												
	D												
	E												
	F												
	G												
	H												

Lib2 Plate 4

5/21/15

AMP	µg/ml	332	166	83	41.5	20.8	10.4	5.18	2.59	1.29	0.64	0.32	0.16
		Antibiotic:						Date:					
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12
A10	A	+	+	+	+	+	+	+	+	+	+	+	+
A11	B	-	-	-	+	+	+	+	+	+	+	+	+
C1	C	+	+	+	+	+	+	+	+	+	+	+	+
C6	D	-	+	+	+	+	+	+	+	+	+	+	+
H5	E	+	+	+	+	+	+	+	+	+	+	+	+
H7	F	+	+	+	+	+	+	+	+	+	+	+	+
	G												
	H												

Amp 1

AMP	µg/ml	332	166	83	41.5	20.8	10.4	5.18	2.59	1.29	0.64	0.32	0.16
		Antibiotic:						Date:					
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12
A10	A												
A11	B												
C1	C												
C6	D												
H5	E												
H7	F												
	G												
	H												

Amp 2

AMP	µg/ml	<del>332</del>	<del>166</del>	<del>83</del>	41.5	20.8	10.4	5.18	2.59	1.29	0.64	0.32	0.16
		Antibiotic:						Date:					
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12
A10	A	+	+	+	+	+	+	+	+	+	+	+	+
A11	B	-	-	-	+	+	+	+	+	+	+	+	+
C1	C	+	+	+	+	+	+	+	+	+	+	+	+
C6	D	-	-	+	+	+	+	+	+	+	+	+	+
H5	E	-	+	+	+	+	+	+	+	+	+	+	+
H7	F	-	+	+	+	+	+	+	+	+	+	+	+
	G												
	H												

Amp 2

664      332      166      83      41.5      20.7      10.3      5.1      2.5      1.3      .64      .32

Lib2 Plot 4

5/22/15

AMP	µg/ml	332	166	83	41.5	20.8	10.4	5.18	2.59	1.29	0.64	0.32	0.16
Antibiotic:		Date:											
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12
A10	A	-	-	+	+	+	+	+	+	+	+	+	+
A11	B	-	-	+	-	-	+	+	+	+	+	+	+
C1	C	-	-	+	+	+	+	+	+	+	+	+	+
C6	D	-	-	-	+	+	+	+	+	+	+	+	+
H5	E	-	-	+	+	+	+	+	+	+	+	+	+
H7	F	-	-	+	+	+	+	+	+	+	+	+	+
	G												
	H												

# 1

AMP	µg/ml	332	166	83	41.5	20.8	10.4	5.18	2.59	1.29	0.64	0.32	0.16
Antibiotic:		Date:											
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12
A10	A	-	-	+	+	+	+	+	+	+	+	+	+
A11	B	-	-	+	+	+	+	+	+	+	+	+	+
C1	C	-	-	+	+	+	+	+	+	+	+	+	+
C6	D	-	-	-	+	+	+	+	+	+	+	+	+
H5	E	-	-	+	+	+	+	+	+	+	+	+	+
H7	F	-	-	+	+	+	+	+	+	+	+	+	+
	G												
	H												

# 2

AMP	µg/ml	332	166	83	41.5	20.8	10.4	5.18	2.59	1.29	0.64	0.32	0.16
Antibiotic:		Date:											
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12
	A												
	B												
	C												
	D												
	E												
	F												
	G												
	H												

1328-  
664  
332  
166  
83  
41.5  
20.7  
10.3  
5.1  
2.6  
1.3  
.64

MIC - Cephalothin Lib2 Plate 4 5/7/15

Cepha	µg/ml	2400	1200	600	300	150	75	37.5	18.8	9.37	4.68	2.34	1.17												
Antibiotic: Cephalothin													Date: 5/7/15												
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12												
A1	A	-	-	-	-	-	-	-	-	-	+	+	+												
A3	B	-	-	-	-	-	-	-	+	+	+	+	+												
A5	C	-	-	-	-	-	-	-	-	-	+	+	+												
A6	D	-	-	-	-	-	+	+	+	+	+	+	+												
A7	E	-	-	-	-	-	-	-	-	-	+	+	+												
A8	F	-	-	-	-	-	-	-	-	-	+	+	+												
A9	G	-	-	-	-	-	-	-	+	+	+	+	+												
A10	H	-	-	-	+	+	+	+	+	+	+	+	+												
Cepha													µg/ml	2400	1200	600	300	150	75	37.5	18.8	9.37	4.68	2.34	1.17
Antibiotic: Cephalothin													Date: 5/7/15												
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12												
A11	A	-	-	-	-	-	-	-	+	+	+	+	+												
B5	B	-	-	-	-	-	-	-	-	-	+	+	+												
B7	C	-	-	-	-	-	-	-	-	+	+	+	+												
B8	D	-	-	-	-	-	-	-	-	-	+	+	+												
B10	E	-	-	-	-	-	-	-	-	-	+	+	+												
B11	F	-	-	-	-	-	-	-	-	-	+	+	+												
B12	G	-	-	-	-	-	-	-	-	+	+	+	+												
C1	H	-	-	+	+	+	+	+	+	+	+	+	+												
Cepha													µg/ml	2400	1200	600	300	150	75	37.5	18.8	9.37	4.68	2.34	1.17
Antibiotic: Cephalothin													Date: 5/7/15												
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12												
C2	A	-	-	-	-	-	-	-	-	-	+	+	+												
C3	B	-	-	-	-	-	-	-	-	-	-	+	+												
C4	C	-	-	-	-	-	-	+	+	+	+	+	+												
C5	D	-	-	-	-	-	-	-	-	-	+	+	+												
C6	E	-	-	-	-	+	+	+	+	+	+	+	+												
C7	F	-	-	-	-	-	-	-	-	+	+	+	+												
C9	G	-	-	-	-	-	-	-	-	-	+	+	+												
C10	H	-	-	-	-	-	-	-	-	-	+	+	+												

#1

\*\*\*

#2

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#3

Page 1 of 3

MFC - Cephalothin Lib2 Plate 4 5/7/15

Cepha	µg/ml	2400	1200	600	300	150	75	37.5	18.8	9.37	4.68	2.34	1.17
Antibiotic: Cephalothin													
Date: 5/7/15													
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12
C11	A	-	-	-	+	+	+	+	+	+	+	+	+
D2	B	-	-	-	-	-	-	-	-	-	+	+	+
D3	C	-	-	-	-	-	-	-	-	-	-	+	+
D4	D	-	-	-	-	-	-	-	+	+	+	+	+
D5	E	↓	↓	↓	↓	↓	↓	↓	-	-	-	+	+
D6	F	↓	↓	↓	↓	↓	↓	↓	+	+	+	+	+
D7	G	↓	↓	↓	↓	↓	↓	↓	-	-	-	+	+
D8	H	↓	↓	↓	↓	↓	↓	↓	+	+	+	+	+

# 4

Cepha	µg/ml	2400	1200	600	300	150	75	37.5	18.8	9.37	4.68	2.34	1.17
Antibiotic: Cephalothin													
Date: 5/7/15													
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12
D9	A	-	-	-	-	-	-	-	-	-	-	+	+
D11	B	↓	↓	↓	↓	↓	↓	↓	+	+	+	+	+
E1	C	↓	↓	↓	↓	↓	↓	↓	+	+	+	+	+
E3	D	↓	↓	↓	↓	↓	↓	↓	-	-	-	+	+
E5	E	↓	↓	↓	↓	↓	↓	↓	-	-	+	+	+
E7	F	↓	↓	↓	↓	↓	↓	↓	+	+	+	+	+
E9	G	↓	↓	↓	↓	↓	↓	↓	-	+	+	+	+
E10	H	↓	↓	↓	↓	↓	↓	↓	-	-	+	+	+

# 5

Cepha	µg/ml	2400	1200	600	300	150	75	37.5	18.8	9.37	4.68	2.34	1.17
Antibiotic: Cephalothin													
Date: 5/13													
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12
F1	A	-	-	-	-	-	-	-	-	-	+	+	+
F3	B	↓	↓	↓	↓	↓	↓	↓	↓	-	+	+	+
F4	C	↓	↓	↓	↓	↓	↓	↓	↓	-	+	+	+
F5	D	↓	↓	↓	↓	↓	↓	↓	↓	+	+	+	+
F10	E	↓	↓	↓	↓	↓	↓	↓	↓	+	+	+	+
<del>F11</del>	F	↓	↓	↓	↓	↓	↓	↓	↓	+	+	+	+
G8	G	↓	↓	↓	↓	↓	↓	↓	↓	-	+	+	+
G9	H	↓	↓	↓	↓	↓	↓	↓	↓	+	+	+	+

F11

# 6





MIC - Cephalothin

Lib 2, Plate 4

5/13/15

Cepha	µg/ml	2400	1200	600	300	150	75	37.5	18.8	9.37	4.68	2.34	1.17
Antibiotic: Cephalothin										Date: 5/13			
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12
G11	A	-	-	-	-	-	-	-	-	-	-	+	+
G12	B	-	-	-	-	-	-	-	-	+	+	+	+
H1	C	-	+	+	+	+	+	+	+	+	+	+	+
H2	D	-	-	-	-	-	+	+	+	+	+	+	+
H3	E	-	-	-	-	-	-	-	-	+	+	+	+
H4	F	-	-	-	-	-	+	+	+	+	+	+	+
H5	G	-	-	-	-	-	+	+	+	+	+	+	+
H6	H	-	-	-	-	-	-	+	+	+	+	+	+

#7

Cepha	µg/ml	2400	1200	600	300	150	75	37.5	18.8	9.37	4.68	2.34	1.17
Antibiotic: Cephalothin										Date: 5/13			
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12
H7	A	-	-	-	-	+	+	+	+	+	+	+	+
H12	B	-	-	-	-	-	-	-	-	-	+	+	+
A10	C	-	-	-	+	+	+	+	+	+	+	+	+
A11	D	-	-	-	-	-	-	-	+	+	+	+	+
C1	E	-	+	+	+	+	+	+	+	+	+	+	+
C6	F	-	-	-	-	+	+	+	+	+	+	+	+
	G	[Wavy line across the row]											
	H	[Wavy line across the row]											

part

#8

Cepha	µg/ml	2400	1200	600	300	150	75	37.5	18.8	9.37	4.68	2.34	1.17
Antibiotic: Cephalothin										Date: 5/13			
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12
	A												
	B												
	C												
	D												
	E												
	F												
	G												
	H												

Lib2 Plate 4

5/21/15

Cepha	µg/ml	2400	1200	600	300	150	75	37.5	18.8	9.37	4.68	2.34	1.17
Antibiotic: Cephalothin													
Date:													
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12
A10	A	-	-	-	+	+	+	+	+	+	+	+	+
A4	B	-	-	-	-	-	-	+	+	+	+	+	+
C1	C	-	+	+	+	+	+	+	+	+	+	+	+
C6	D	-	-	-	+	+	+	+	+	+	+	+	+
H5	E	-	-	-	-	-	+	+	+	+	+	+	+
H7	F	-	-	-	-	-	+	+	+	+	+	+	+
	G												
	H												

Cephalo 1

Cepha	µg/ml	2400	1200	600	300	150	75	37.5	18.8	9.37	4.68	2.34	1.17
Antibiotic: Cephalothin													
Date:													
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12
	A												
	B												
	C												
	D												
	E												
	F												
	G												
	H												

Cepha	µg/ml	2400	1200	600	300	150	75	37.5	18.8	9.37	4.68	2.34	1.17
Antibiotic: Cephalothin													
Date:													
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12
A10	A	-	-	+	+	+	+	+	+	+	+	+	+
A11	B	-	-	-	+	-	-	-	-	+	+	+	+
C1	C	-	-	+	+	+	+	+	+	+	+	+	+
C6	D	-	-	-	-	+	+	+	+	+	+	+	+
H5	E	-	-	-	-	-	+	+	+	+	+	+	+
H7	F	-	-	-	-	-	+	+	+	+	+	+	+
	G	/	/	/	/	/	/	/	/	/	/	/	/
	H	/	/	/	/	/	/	/	/	/	/	/	/

Cephalo 2

4800  
2400  
1200  
600  
300  
150  
75  
37.5  
18.8  
9.37  
4.68  
2.34

MIC - Ceftazidime Lib2 Plate 4

Cefta	µg/ml	25	12.5	6.25	3.1	1.56	0.78	0.39	0.19	0.1	0.05	0.02	0.01
Antibiotic: Ceftazidime										Date: 5/8/15			
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12
A1	A	↓	↓	↓	↓	↓	↓	↓	↓	-	-	+	+
A3	B	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	+	+
A5	C	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	+	+
A6	D	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	+	+
A7	E	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	+	+
A8	F	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	+	+
A9	G	↓	↓	↓	↓	↓	↓	↓	↓	-	-	+	+
A10	H	+	+	+	+	+	+	+	+	+	+	+	+

#1

Cefta	µg/ml	25	12.5	6.25	3.1	1.56	0.78	0.39	0.19	0.1	0.05	0.02	0.01
Antibiotic: Ceftazidime										Date: 5/8/15			
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12
A11	A	-	-	-	-	-	-	-	-	-	+	+	+
B5	B	↓	↓	↓	↓	↓	↓	↓	↓	-	-	+	+
B7	C	↓	↓	↓	↓	↓	↓	↓	↓	-	+	+	+
B8	D	↓	↓	↓	↓	↓	↓	↓	↓	-	-	+	+
B10	E	↓	↓	↓	↓	↓	↓	↓	↓	-	-	+	+
B11	F	↓	↓	↓	↓	↓	↓	↓	↓	-	-	+	+
B12	G	-	-	-	-	-	-	-	-	-	+	+	+
C1	H	-	-	-	-	-	+	+	+	+	+	+	+

#2

Cefta	µg/ml	25	12.5	6.25	3.1	1.56	0.78	0.39	0.19	0.1	0.05	0.02	0.01
Antibiotic: Ceftazidime										Date: 5/8/15			
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12
C2	A	-	-	-	-	-	-	-	-	-	-	+	+
C3	B	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	+	+
C4	C	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	+	+
C5	D	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	+	+
C6	E	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	+	+
C7	F	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	+	+
C9	G	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	+	+
C10	H	-	-	-	-	-	-	-	-	-	-	+	+

#3

① of ③

MFC - Ceftazidime

Lib2 Plate 4

Cefta	µg/ml	25	12.5	6.25	3.1	1.56	0.78	0.39	0.19	0.1	0.05	0.02	0.01
Antibiotic: Ceftazidime													Date: 5/8/15
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12
C11	A	-	-	-	-	-	-	-	-	-	+	+	+
D2	B	↓	↓	↓	↓	↓	↓	↓	↓	↓	-	+	+
D3	C	↓	↓	↓	↓	↓	↓	↓	↓	↓	-	+	+
D4	D	↓	↓	↓	↓	↓	↓	↓	↓	↓	-	+	+
D5	E	↓	↓	↓	↓	↓	↓	↓	↓	↓	-	+	+
D6	F	↓	↓	↓	↓	↓	↓	↓	↓	↓	+	+	+
D7	G	↓	↓	↓	↓	↓	↓	↓	↓	↓	-	+	+
D8	H	-	-	-	-	-	-	+	+	+	+	+	+

#4

Cefta	µg/ml	25	12.5	6.25	3.1	1.56	0.78	0.39	0.19	0.1	0.05	0.02	0.01
Antibiotic: Ceftazidime													Date: 5/8/15
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12
D9	A	↓	↓	↓	↓	↓	↓	↓	↓	↓	-	+	+
D11	B	↓	↓	↓	↓	↓	↓	↓	↓	↓	-	+	+
E1	C	↓	↓	↓	↓	↓	↓	↓	↓	↓	+	+	+
E3	D	↓	↓	↓	↓	↓	↓	↓	↓	↓	-	+	+
E5	E	↓	↓	↓	↓	↓	↓	↓	↓	↓	-	+	+
E7	F	↓	↓	↓	↓	↓	↓	↓	↓	↓	-	+	+
E9	G	↓	↓	↓	↓	↓	↓	↓	↓	↓	-	+	+
E10	H	↓	↓	↓	↓	↓	↓	↓	↓	↓	-	+	+

#5

Cefta	µg/ml	25	12.5	6.25	3.1	1.56	0.78	0.39	0.19	0.1	0.05	0.02	0.01
Antibiotic: Ceftazidime													Date: 5/14/15
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12
F1	A	-	-	-	-	-	-	-	-	-	-	+	+
F3	B	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	+	+
F4	C	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	+	+
F5	D	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	+	+
F10	E	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	+	+
F11	F	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	+	+
G8	G	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	+	+
G9	H	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	+	+

#6

(2) of (3)

MIC - Cefta

Lib2 Plate 4

Cefta	µg/ml	25	12.5	6.25	3.1	1.56	0.78	0.39	0.19	0.1	0.05	0.02	0.01	
Antibiotic: Ceftazidime													Date:	
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12	
G11	A	-	-	-	-	-	-	-	-	-	-	+	+	
G12	B	-	-	-	-	-	-	-	-	-	-	+	+	
H1	C	-	-	-	+/-	+	+	+	+	+	+	+	+	
H2	D	-	-	-	-	-	-	-	-	-	+	+	+	
H3	E	-	-	-	-	-	-	-	-	-	-	+	+	
H4	F	-	-	-	-	-	-	-	-	-	-	+	+	
H5	G	-	-	-	-	+	+	+	+	+	+	+	+	
H6	H	-	+	+	+	+	+	+	+	+	+	+	+	

# 2

Cefta	µg/ml	25	12.5	6.25	3.1	1.56	0.78	0.39	0.19	0.1	0.05	0.02	0.01	
Antibiotic: Ceftazidime													Date:	
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12	
H7	A	-	+	+	+	+	+	+	+	+	+	+	+	
H12	B	-	-	-	-	-	-	-	-	-	-	+	+	
A10	C	-	-	+	+	+	+	+	+	+	+	+	+	
A11	D	-	-	-	-	-	-	-	-	-	+	+	+	
C1	E	-	-	-	-	-	+	+	+	+	+	+	+	
C6	F	-	-	-	-	-	+	+	+	+	+	+	+	
	G													
	H													

# 8

Cefta	µg/ml	25	12.5	6.25	3.1	1.56	0.78	0.39	0.19	0.1	0.05	0.02	0.01	
Antibiotic: Ceftazidime													Date:	
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12	
	A													
	B													
	C													
	D													
	E													
	F	100	50	25	12.5	6.2	3.1	1.5	0.78	0.4	0.2	0.1	0.05	
A10	G	-	-	-	-	+	+	+	+	+	+	+	+	
A10	H	-	-	+	+	+	+	+	+	+	+	+	+	

# 9

50 25 12.5 6.2 3.1 1.5 0.78 0.4 0.2 0.1 0.05 0.02

Lib2 Plate 4

5121115

Cefta	µg/ml	25	12.5	6.25	3.1	1.56	0.78	0.39	0.19	0.1	0.05	0.02	0.01	
Antibiotic: Ceftazidime													Date:	
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12	
A10	A	+	+	+	+	+	+	+	+	+	+	+	+	
A11	B	+	+	+	+	+	+	+	+	+	+	+	+	
C1	C	+	+	+	+	+	+	+	+	+	+	+	+	
C6	D	+	+	+	+	+	+	+	+	+	+	+	+	
H5	E	+	+	+	+	+	+	+	+	+	+	+	+	
H7	F	+	+	+	+	+	+	+	+	+	+	+	+	
	G													
	H													

Cefta 1

Cefta	µg/ml	25	12.5	6.25	3.1	1.56	0.78	0.39	0.19	0.1	0.05	0.02	0.01	
Antibiotic: Ceftazidime													Date:	
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12	
	A													
	B													
	C													
	D													
	E													
	F													
	G													
	H													

Cefta	µg/ml	25	12.5	6.25	3.1	1.56	0.78	0.39	0.19	0.1	0.05	0.02	0.01	
Antibiotic: Ceftazidime													Date:	
Clone	Lane	1	2	3	4	5	6	7	8	9	10	11	12	
A10	A	+	+	+	+	+	+	+	+	+	+	+	+	
A11	B	+	+	+	+	+	+	+	+	+	+	+	+	
C1	C	+	+	+	+	+	+	+	+	+	+	+	+	
C6	D	+	+	+	+	+	+	+	+	+	+	+	+	
H5	E	+	+	+	+	+	+	+	+	+	+	+	+	
H7	F	+	+	+	+	+	+	+	+	+	+	+	+	
	G													
	H													

Cefta 2

50 25 12.5 6.25 3.1 1.56 .78 .39 .19 .09 .04 .02