

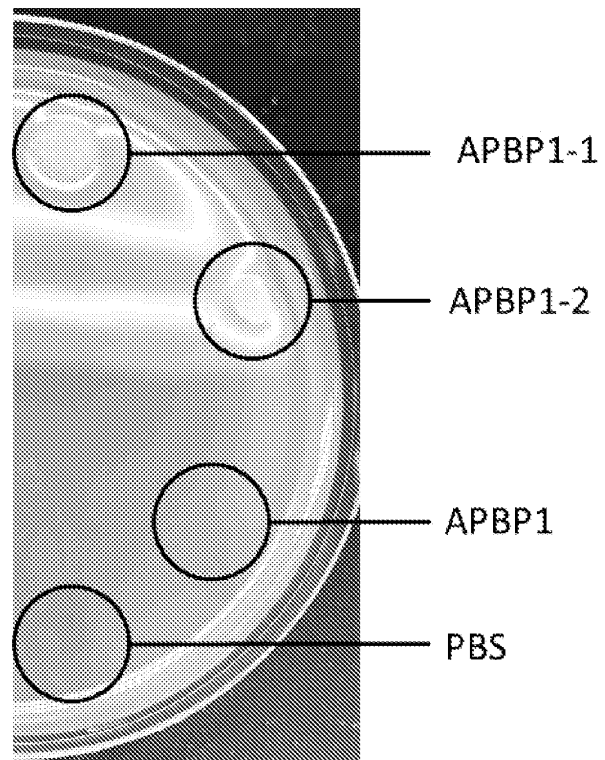


FIG. 1

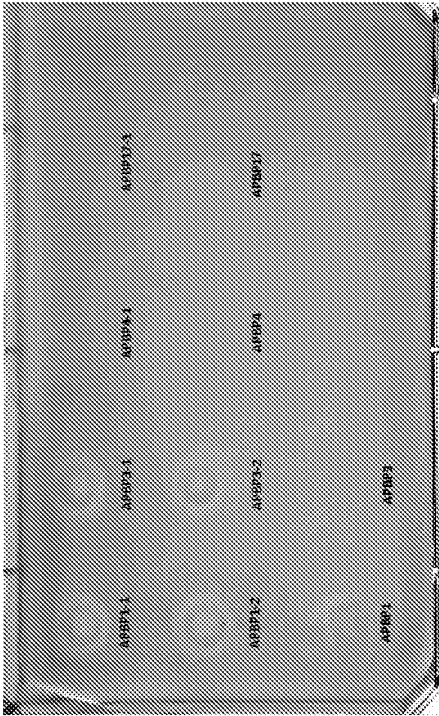


FIG. 2B

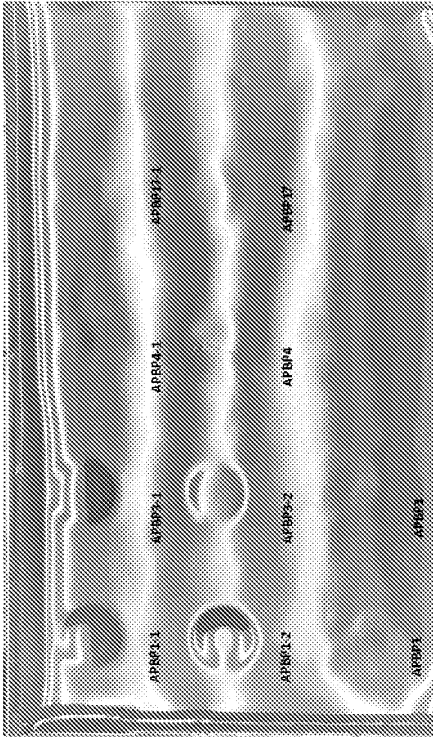


FIG. 2A

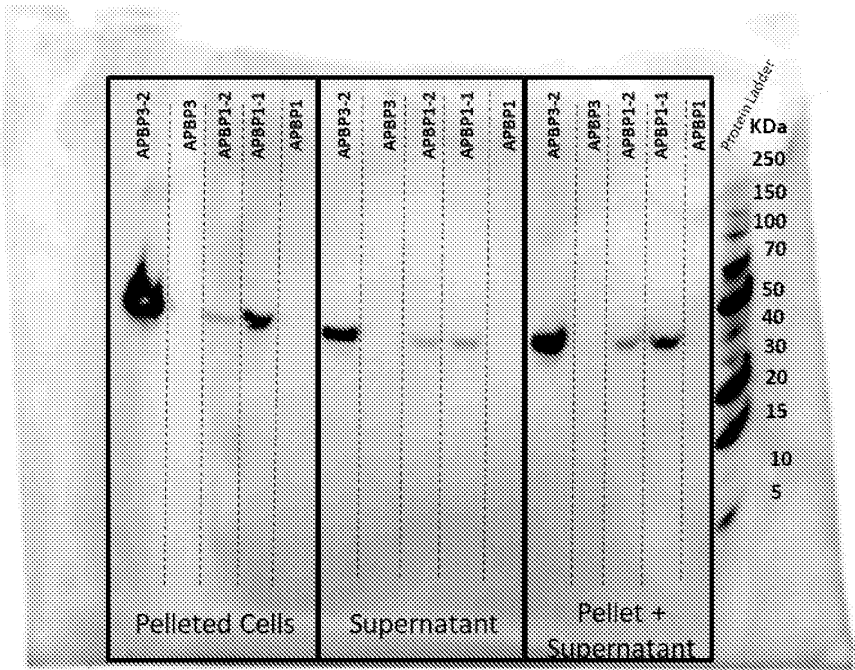


FIG. 3

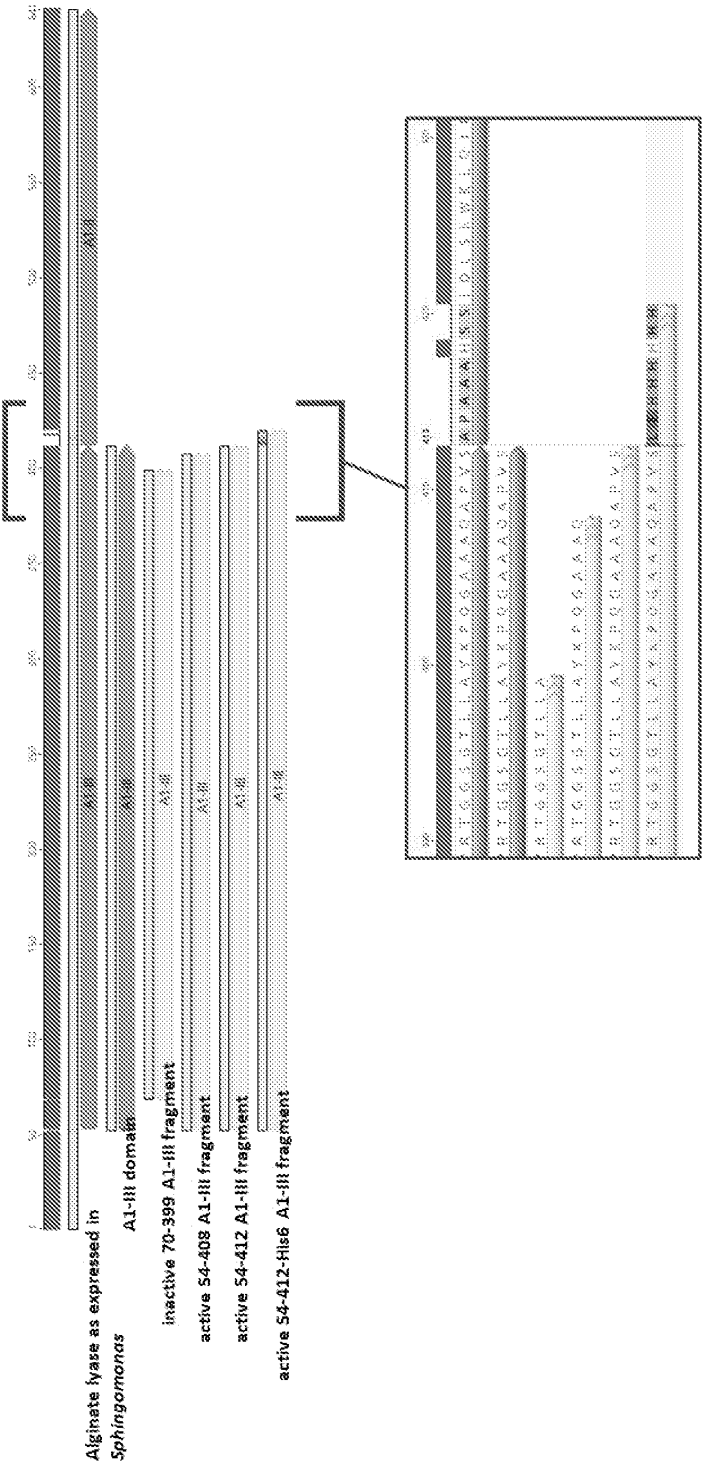
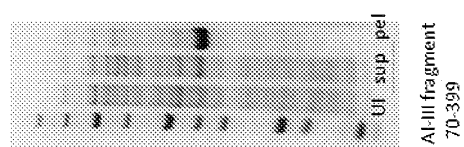
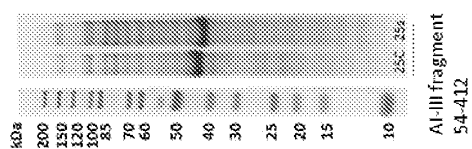
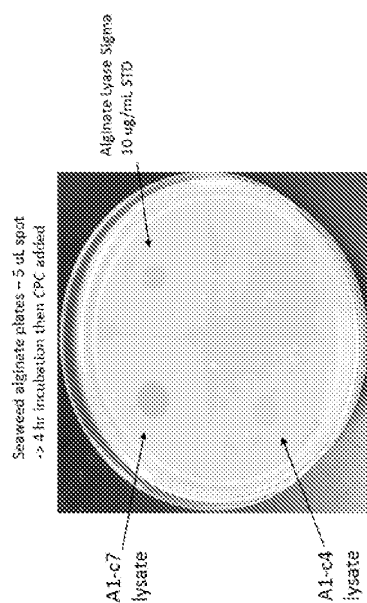
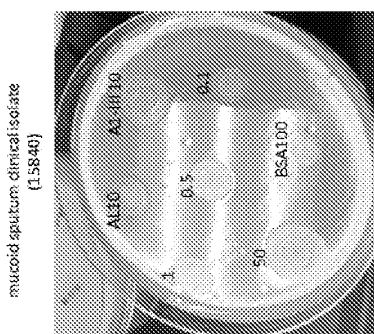


FIG. 4



Lane	Content	Phage	Description
1	ladder		
2	blank		
3	supernatant	APBP3-6	APBP3g37-A1-III-6His (E. coli codon optimized)
4	pellet		
5	supernatant	APBP1-1	APBP1g82-A1-III-6His (E. coli codon optimized)
6	pellet		
7	supernatant	APBP2-1	APBP2g801-A1-III-6His (E. coli codon opt)
8	pellet		
9	supernatant	APBP6-1	APBP6g65-A1-III (2A codon optimized)
10	pellet		
11	supernatant	APBP4-4	APBP4g3A1-III6His (E. coli codon optimized)
12	pellet		
13	blank		
14	protein standard -- 3 µg/ml		
15	protein standard -- 3 µg/ml		

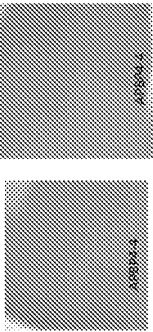
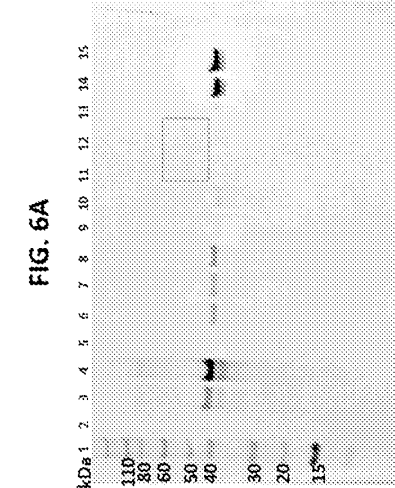


FIG. 6D

FIG. 6C

Lane	Content	Bacterial Host	Phage	Description
1	supernatant	7193	AP864.7	AP864 gp71 A1-III gp72
2	pellet	7193		
3	supernatant	7193	AP864.5	AP864 gp66 A1-III gp67
4	pellet	7193		
5	supernatant	7193	AP864	Parent phage (wildtype)
6	pellet	7193		
7	supernatant	DC47	AP864.7	AP864 gp71 A1-III gp72
8	pellet	DC47		
9	supernatant	DC47	AP864.5	AP864 gp66 A1-III gp67
10	pellet	DC47		
11	supernatant	DC47	AP864	Parent phage (wildtype)
12	pellet	DC47		
13	protein standard -- 125 ng/ml			
14	protein standard -- 250 ng/ml			
15	protein standard -- 250 ng/ml			
16	Ladder			

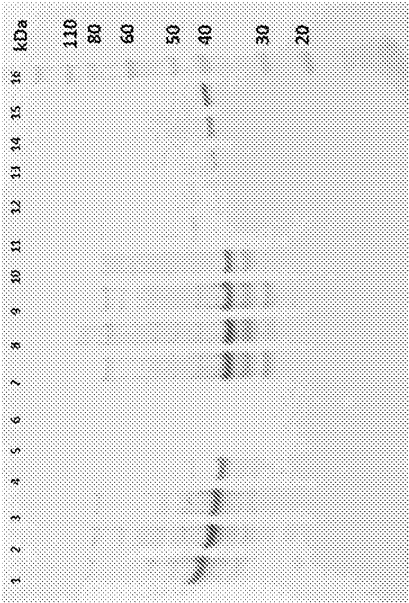
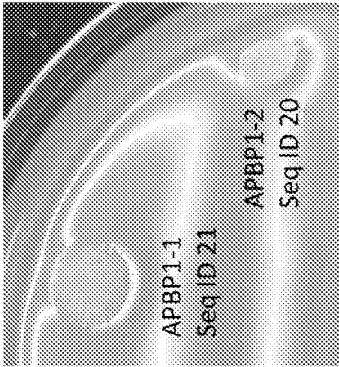
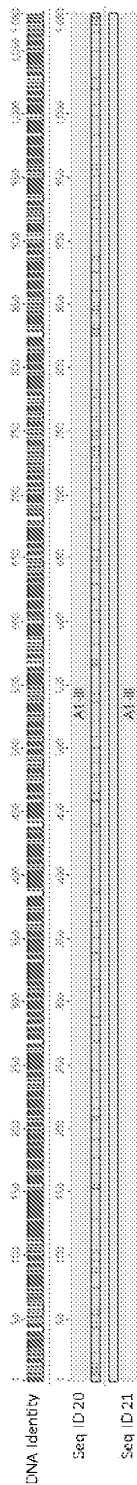


FIG. 7



Inactive configuration of A1-III

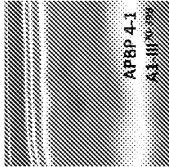


FIG. 9A

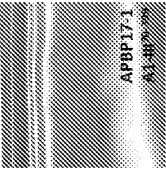


FIG. 9B

Active configurations of A1-III without His₆-tag

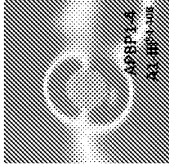


FIG. 9C

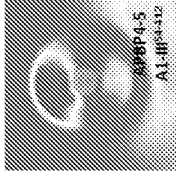


FIG. 9D

Active configurations of A1-III with His₆-tag

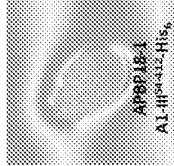


FIG. 9E



FIG. 9G

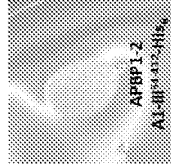


FIG. 9F

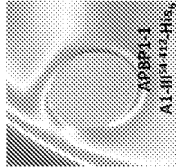


FIG. 9H

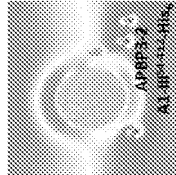


FIG. 9I

FIG. 10A

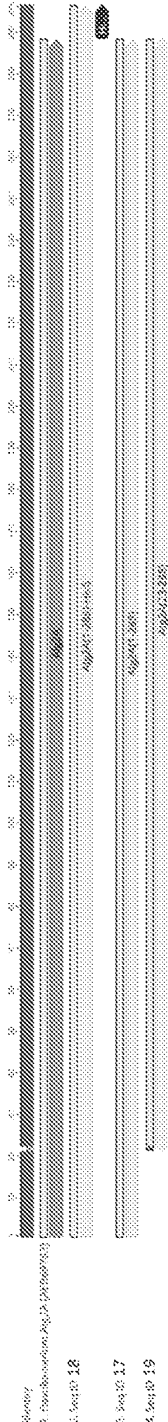
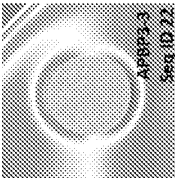


FIG. 10B



active Alg2A-His6

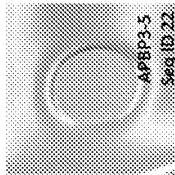


FIG. 10C

active 23-288 Alg2A fragment

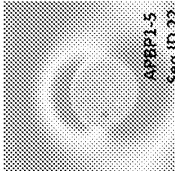
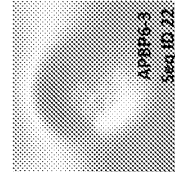
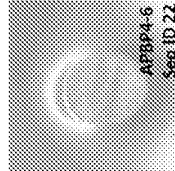
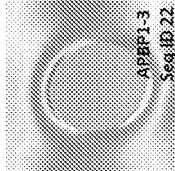
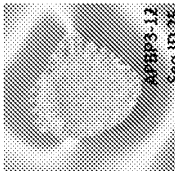
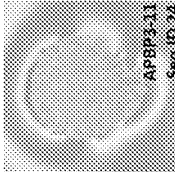


FIG. 10D

% DNA identity between the different genes coding for the Alg2A²³⁻²⁸⁸ protein and cloned in APBPs

Seq ID 22 (<i>E. coli</i> k-12)		Seq ID 25 (<i>S. Typhimurium</i>)
Seq ID 23 (<i>E. coli</i> B)		Seq ID 24 (<i>S. pneumoniae</i>)
Seq ID 24 (<i>S. pneumoniae</i>)		Seq ID 25 (<i>S. Typhimurium</i>)
Seq ID 25 (<i>S. Typhimurium</i>)		

FIG. 10E



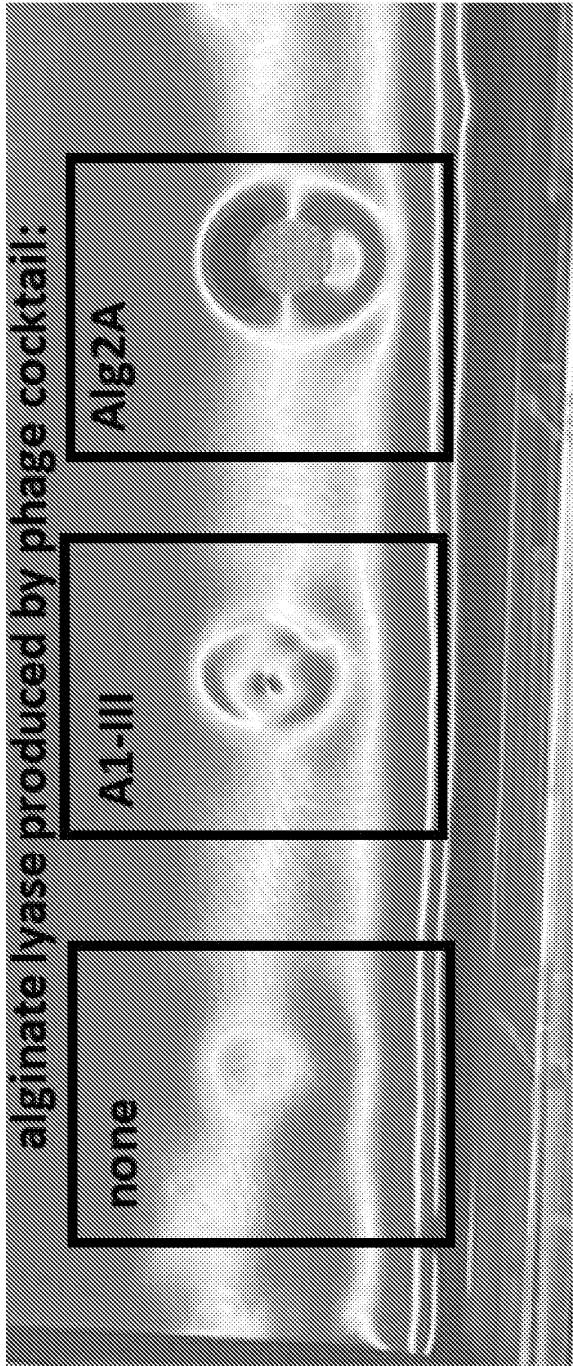


FIG. 11

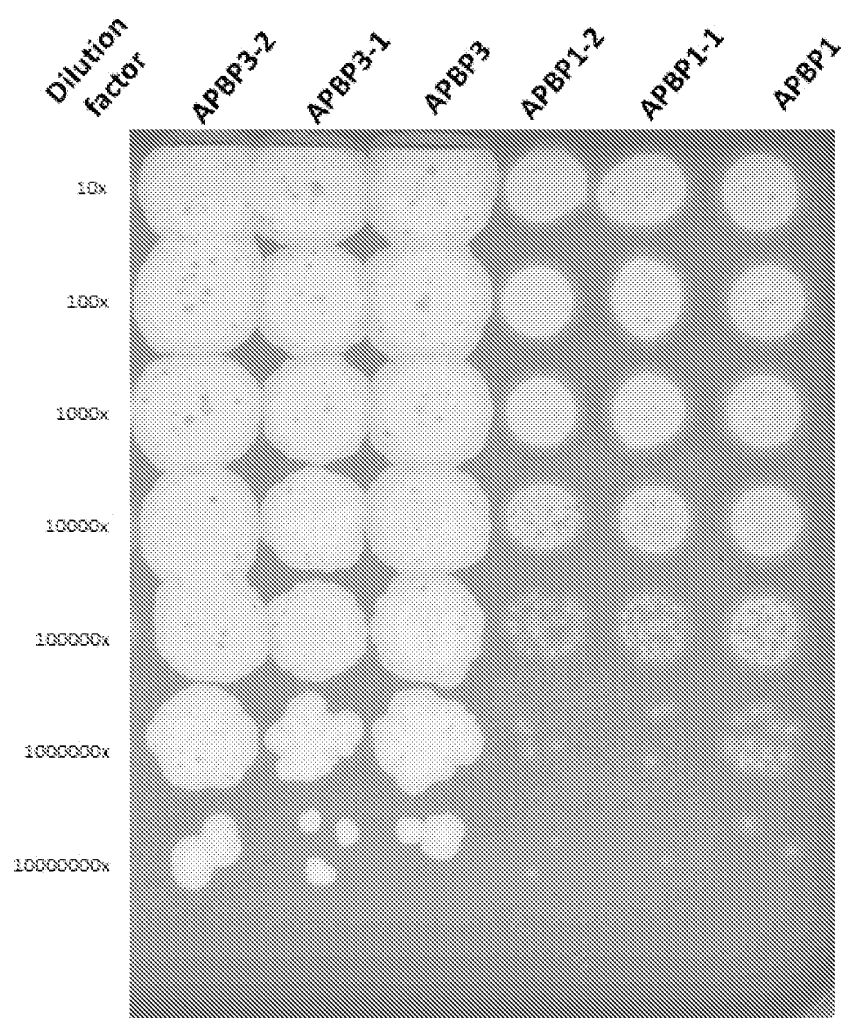
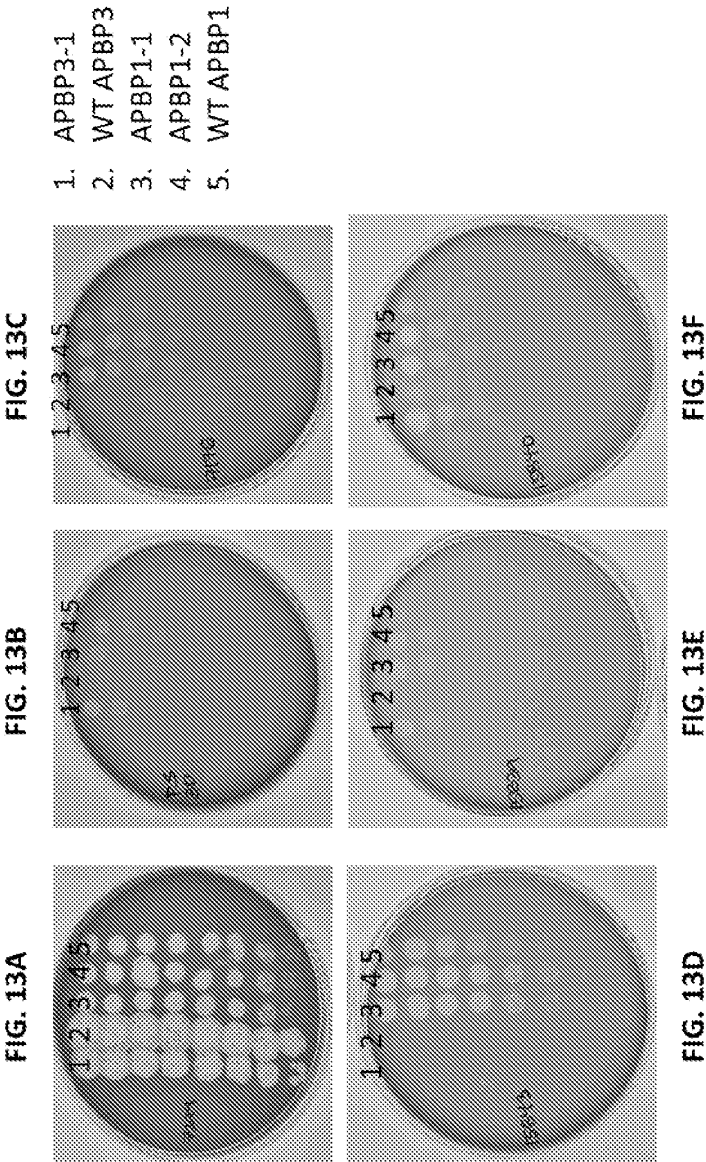


FIG. 12



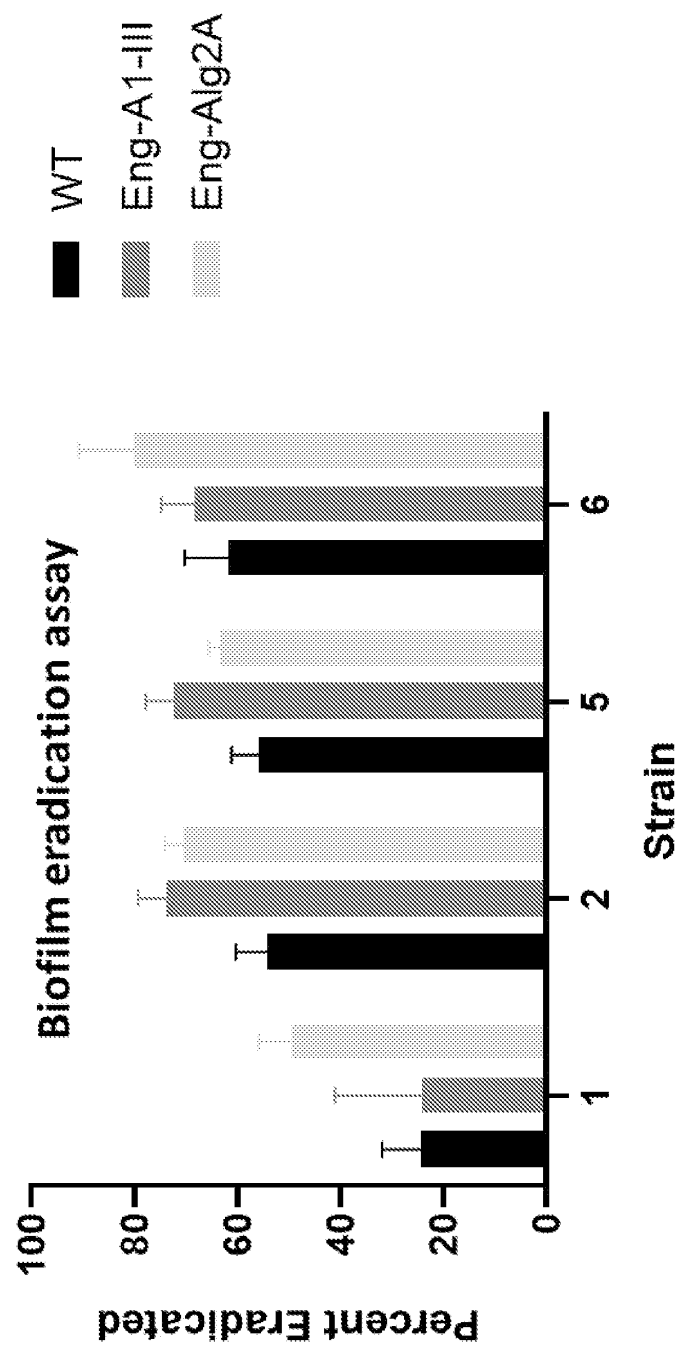
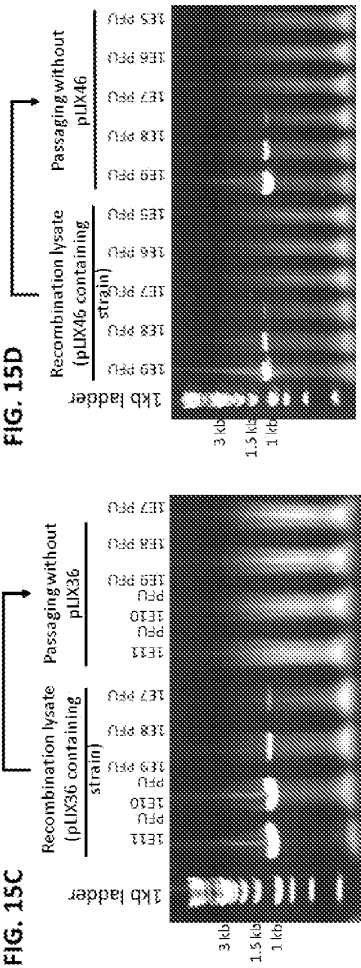
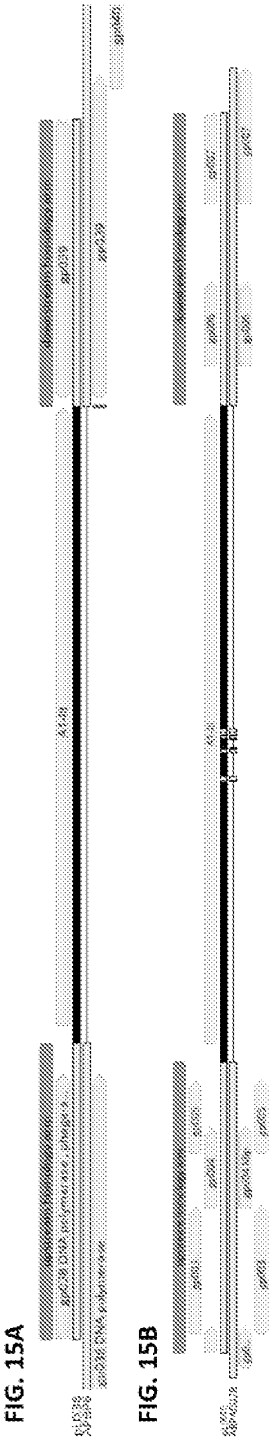


FIG. 14



Lane	Content	Phage	Host	Protein Concentration ng/ml
1	ladder			
2	Purified Ag2A ₅ -42-His ₆			
3	lysate	APBP4-6	7193	1114.8 ng/ml
4	pellet			
5	supernatant			1062.9 ng/ml
6	lysate	APBP18-2	7193	1757.5 ng/ml
7	Pellet			
8	supernatant			474.9 ng/ml
9	lysate	APBP4	7193	
10	pellet			
11	supernatant			
12	lysate	APBP6-3	DCF47	42.0 ng/ml
13	Pellet			
14	supernatant			36.5 ng/ml
15	lysate	APBP6	DCF47	
16	pellet			
17	supernatant			

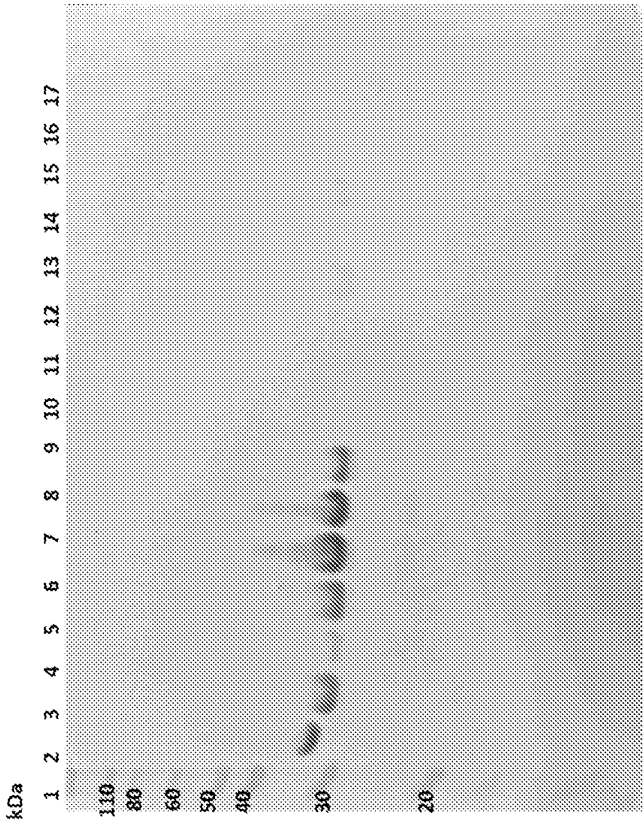


FIG. 16

Lane	Content	Phage	Host	Protein Concentration ng/ml
1	ladder			
2	Purified Alg2A ⁵⁴⁻⁴¹² -His ₆ 1µg/ml			
3	lysate	AP8P3-5	7299	97.7 ng/ml
4	pellet			
5	supernatant			88.7 ng/ml
6	lysate	AP8P1-5	7299	432.7 ng/ml
7	Pellet			
8	supernatant			413.4 ng/ml
9	lysate	AP8P1	7299	
10	pellet			
11	supernatant			

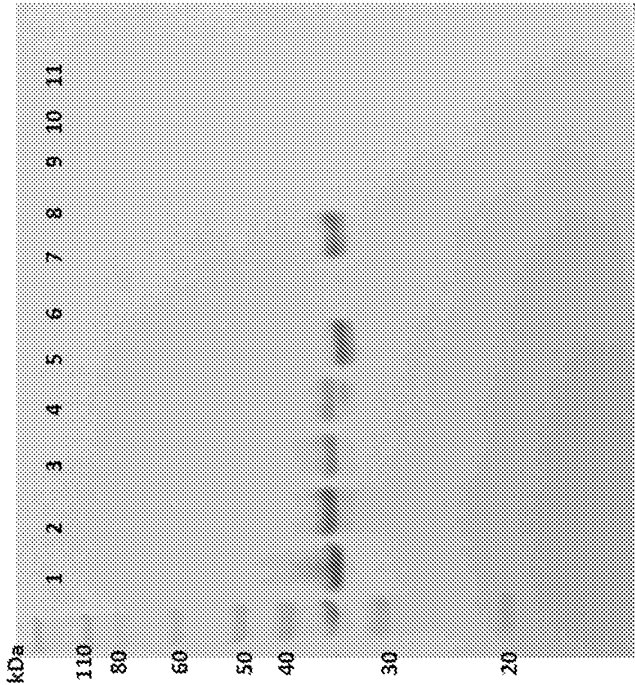


FIG. 17

Lane	Content	Phage	Host
1	pellet	APBP18-1	7193
2	supernatant		
3	Pellet	APBP4-7	7193
4	supernatant		
5	pellet	APBP1-4	7299
6	supernatant		
7	Pellet	APBP3-6	7299
8	supernatant		
9	Pellet	APBP3	7299
10	supernatant		
11	Purified A1-11fs ⁴⁴² . His ₆ ~ 1µg/mL		
12	ladder		
13	pellet	APBP6-1	DCF47
14	supernatant		
15	ladder		

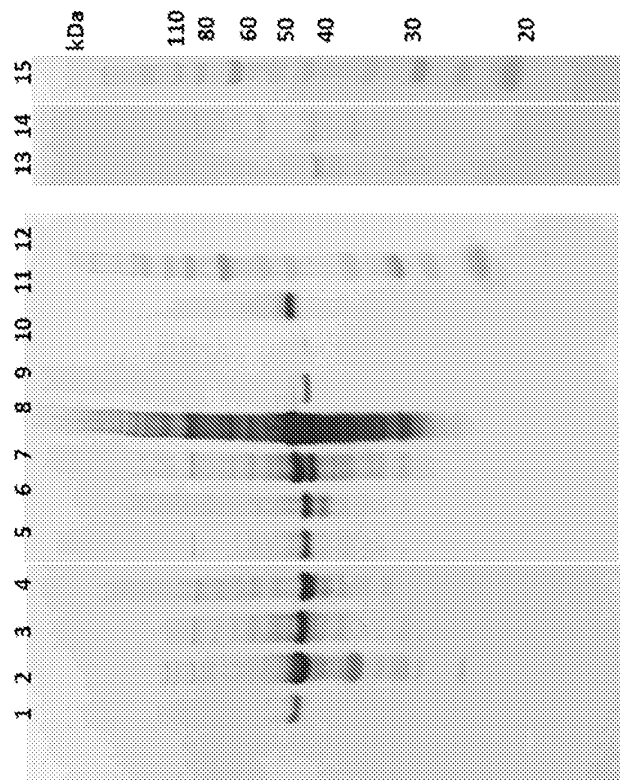


FIG. 18