

Table.S1 The primers used in this study.

Primer name	Primer sequence (5'-3')
<i>capA</i> -up	GGGGTACCCTGACATTTTCGGTGCGAG
<i>capA</i> -down	GCTCTAGATTCATCCTCTCCGGATAAGGC
<i>capB</i> -up	GGGGTACCTCGACTCCCAGCTGG
<i>capB</i> -down	GCTCTAGACGCAGCTCTGCTGTC
<i>capJ</i> -up	GGGGTACCAGTCGTGCGGCTTCG
<i>capJ</i> -down	GCTCTAGAGACCACGCTGATGCC
<i>regI</i> -up	GGGGTACCGATGGTCTGAAAGAAGT
<i>regI</i> -down	GCTCTAGAAACGATGCTGATTGC
<i>regII</i> -up	GGGGTACCTGACCAGACCAGC
<i>regII</i> -down	GCTCTAGAGCGGCGACGGTTA
<i>regIII</i> -up	GGGGTACCTGGATGCGTGGAT
<i>regIII</i> -down	GCTCTAGAGCCATACCGGACT
Fosmid-T7	TAATACGACTCACTATAGGG
Fosmid-RP	CTCGTATGTTGTGTGGAATTGTGAGC

Table.S2 The isoelectric points of all the overexpressed genes.

Gene name	Isoelectric point (pI)
<i>capB</i>	5.72
<i>capC</i>	4.76
<i>capD</i>	5.52
<i>capE</i>	5.29
<i>capFi</i>	4.55
<i>capFii</i>	4.77
<i>capV</i>	4.98
<i>capG</i>	5.05
<i>capT</i>	4.35

Fig.S1

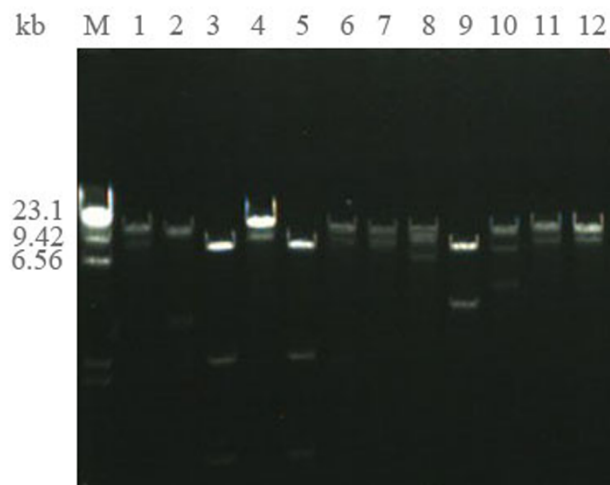


Fig.S1 Agarose electrophoresis of fosmid plasmid after BamHI digestion. Bands 1-12 were plasmids for randomly selected strains. All of the lanes 1-12 contains a vector strip at about 8kb location, the size of other strips are different.

Fig.S2

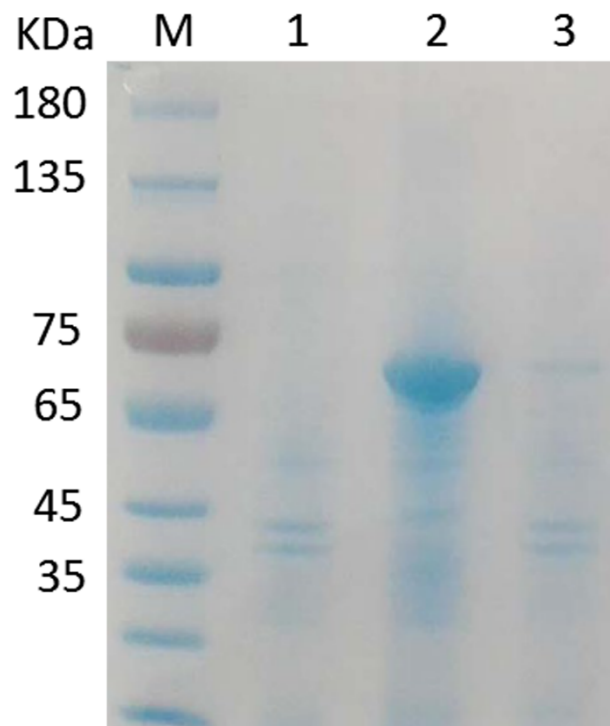


Fig.S2 The SDS-PAGE of the CapB protein overexpressed strains. 1: negative control strains BL21-pUC19-GFP(empty vector) 2: *capB* was constructed into the vector pET30a as a positive control (T7 as promoter) 3: *capB* was constructed into the vector pUC19 using its own promoter. In the position of 70KDa, compared with negative control, *capB* gene expression quantity increased significantly of at lane 2 and 3.