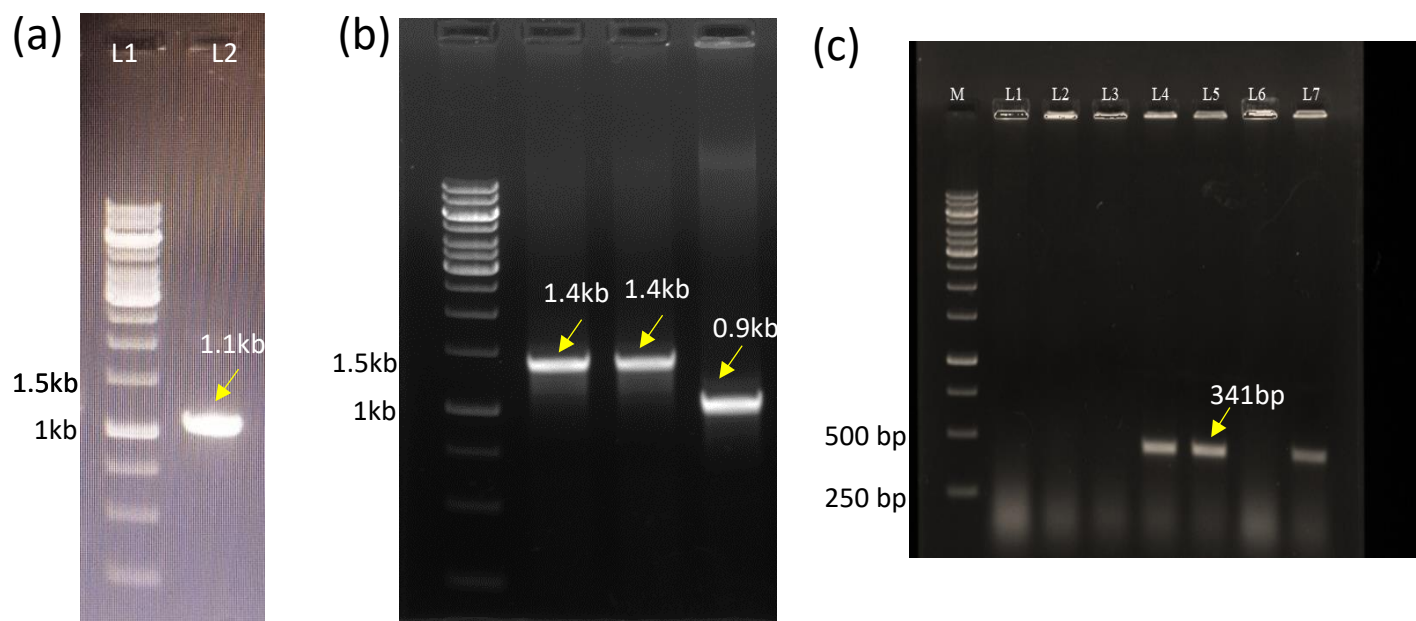




Supplementary Fig 1. Construction and confirmation of STM:*AnarL*.

(a) Amplification of chloramphenicol cassette from pKD3

L1: 1kb ladder

L2: Amplified chloramphenicol cassette from pKD3,

(b) Confirmation of STM:*AnarL:cat* by PCR

L1: 1kb ladder

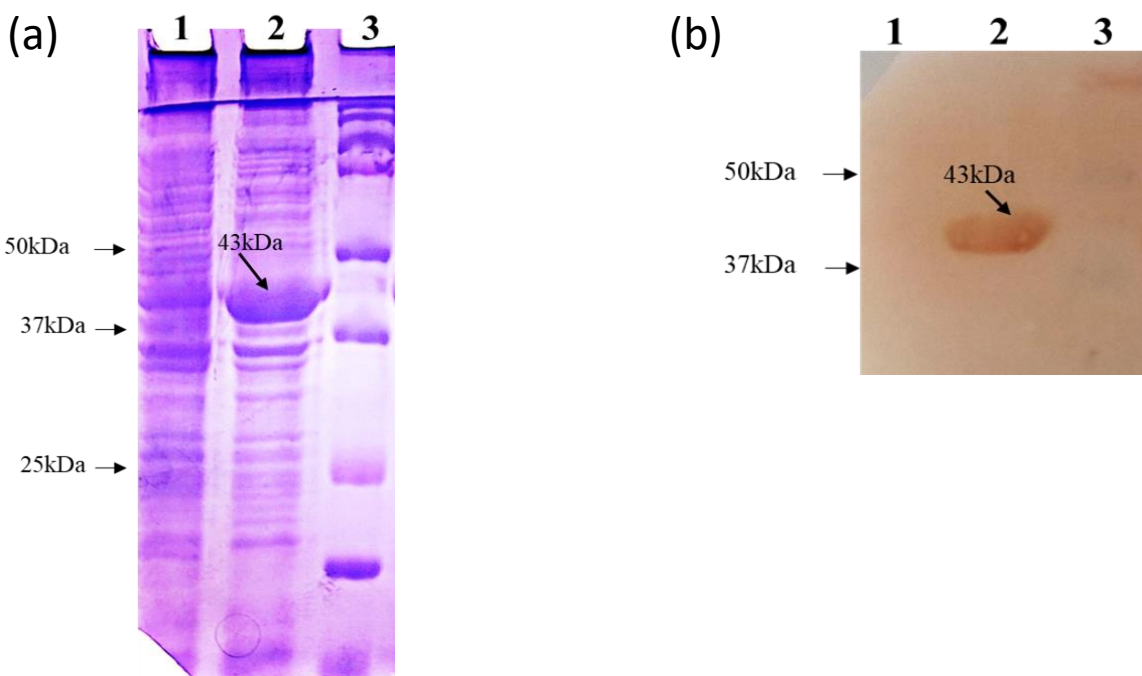
L2 & 3: NarL outer primer in STM:*AnarL:cat*

L4: NarL outer primer in wild type STM,

(c) Confirmation of STM:*AnarL* by colony PCR

M: 1kb ladder

L1 to 7: NarL outer primer in STM:*AnarL*



Supplementary Fig.2. Expression of recombinant NarL protein in prokaryotic system.

(a) Expression of recombinant NarL protein visualized in SDS-PAGE by staining the gel with CBB-R250

L1: Lysates of BL21 containing pET-narL without induction

L2: Lysates of BL21 containing pET-narL induced with 0.8mM of IPTG

L3: Precision plus Protein ladder (Bio-Rad)

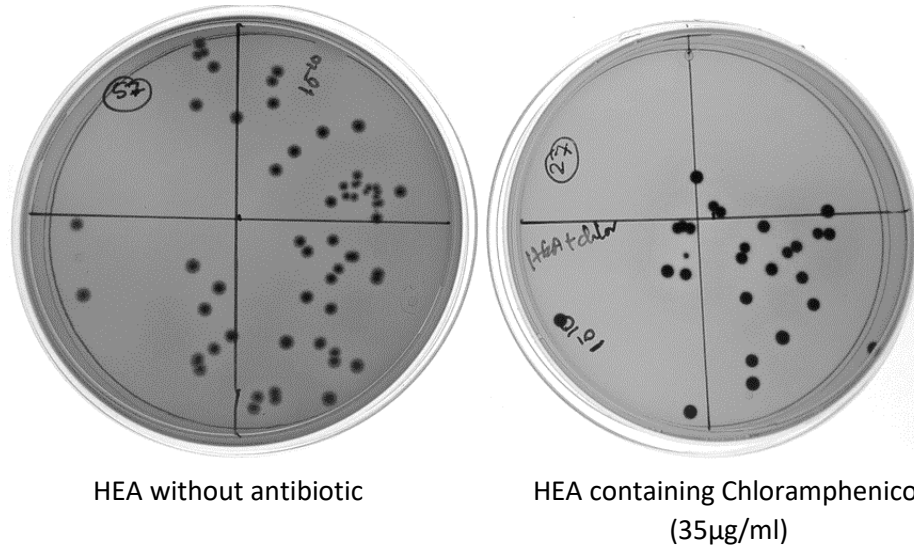
(b) Western blot analysis of recombinant NarL and Fnr proteins incubated with Ni-HRP His probe.

L1: BL21 containing pET-narL without induction

L2: BL21 containing pET-narL induced with 0.8mM of IPTG

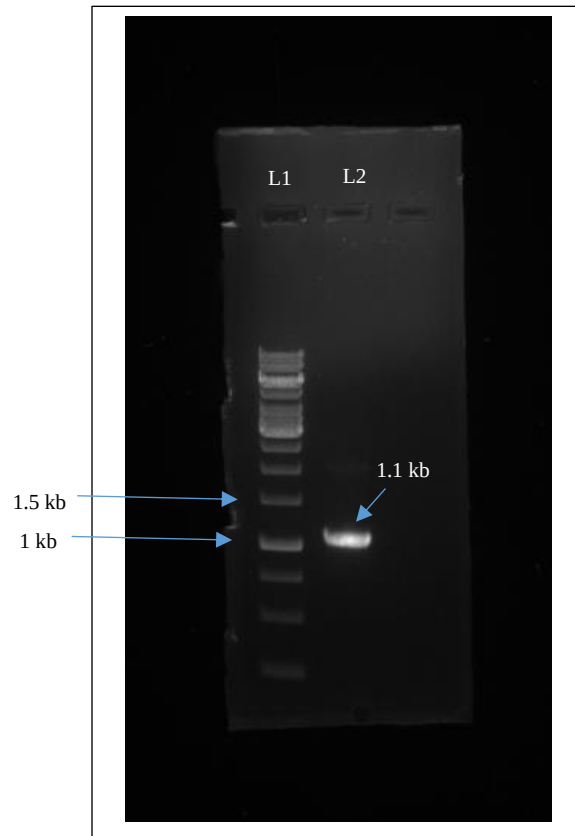
L3: Precision plus Protein ladder (Bio-Rad)

Arrows indicate induced proteins.

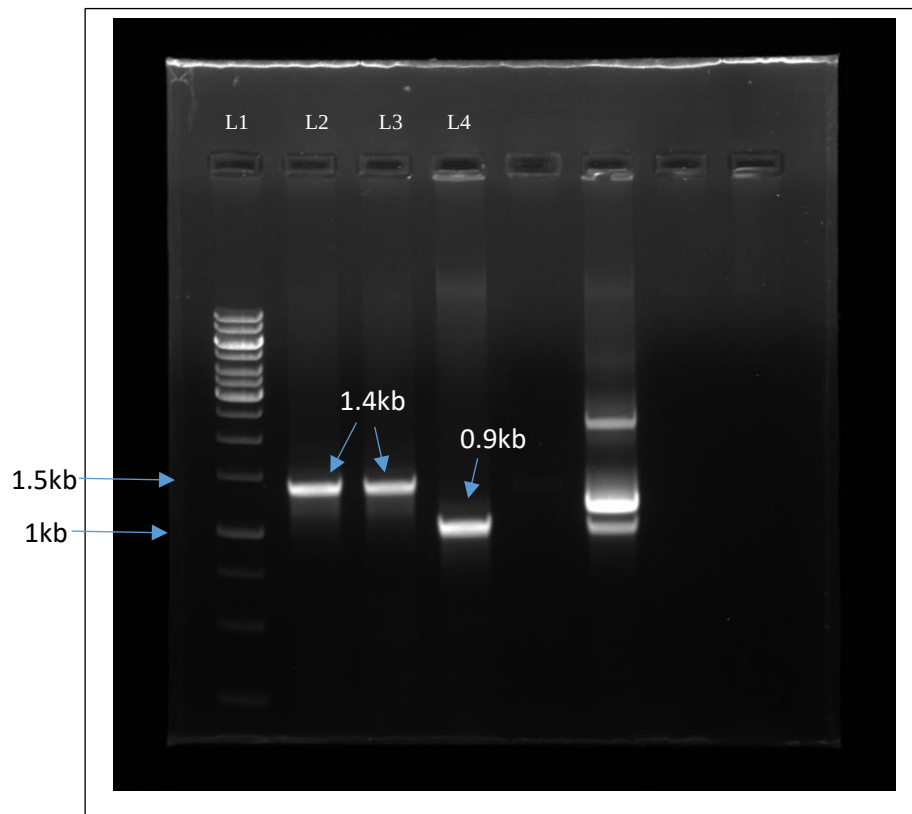


Supplementary Fig 3. Growth competition assay. Bacteria from the cultures grown anaerobically for 20hrs were serially diluted and drop plated on HE agar plate with or without chloramphenicol. Plates with chloramphenicol in the right showed less growth as compared to the one in left those containing no antibiotics.

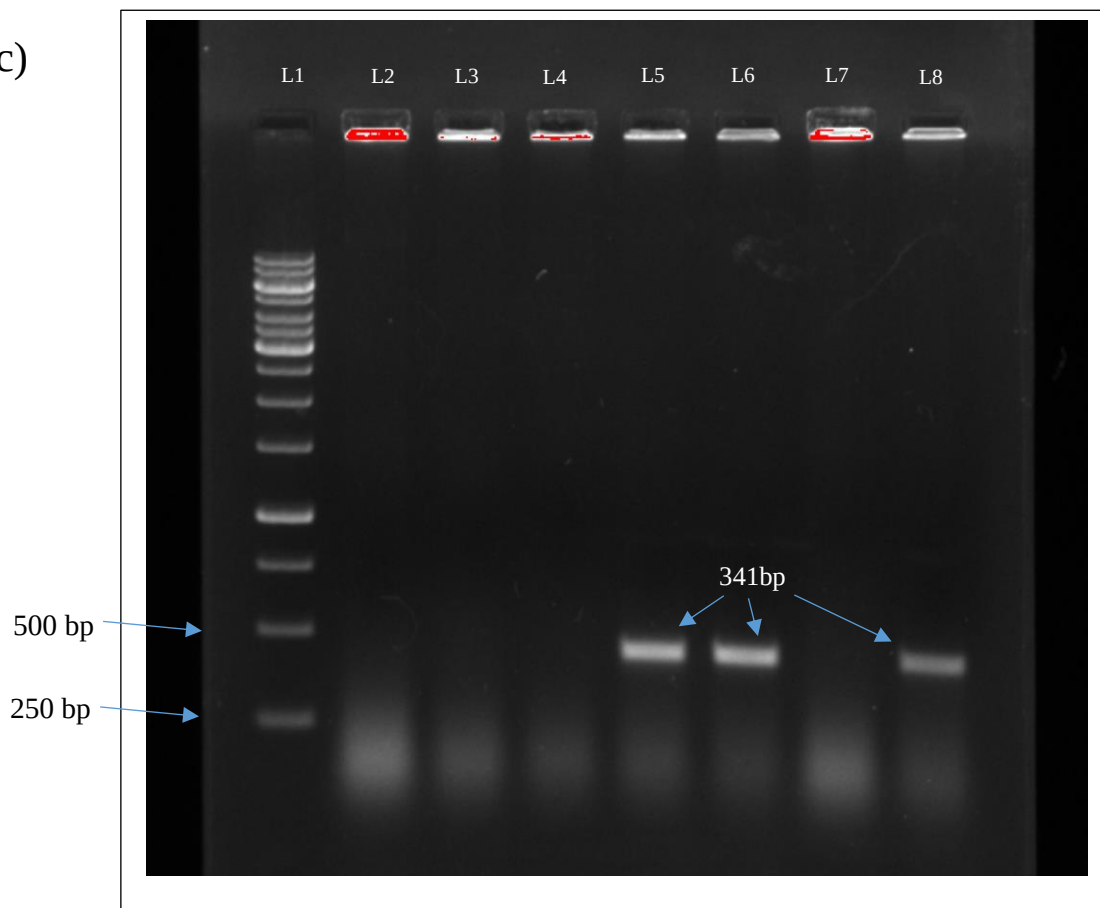
(a)



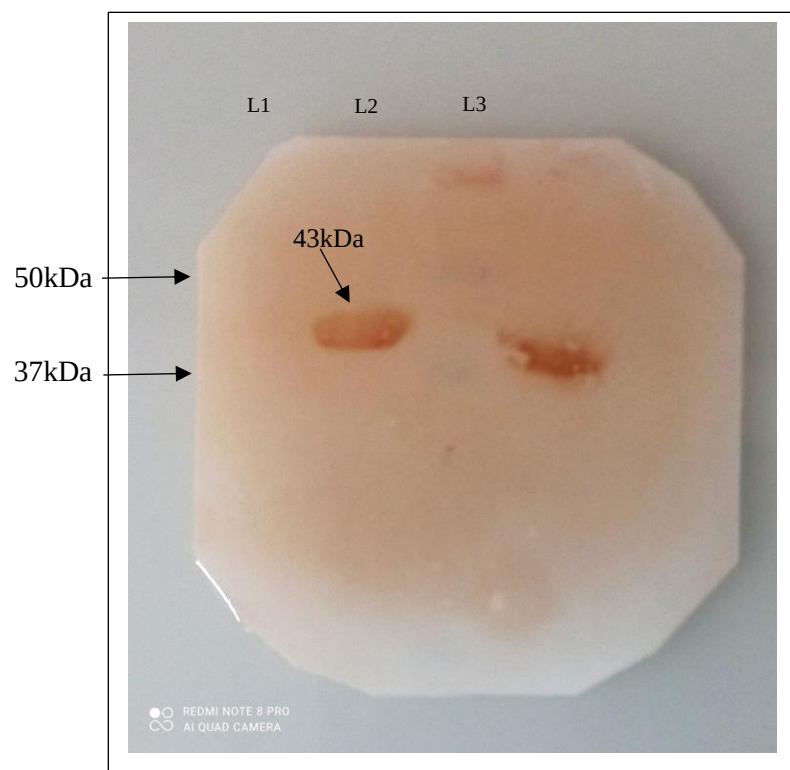
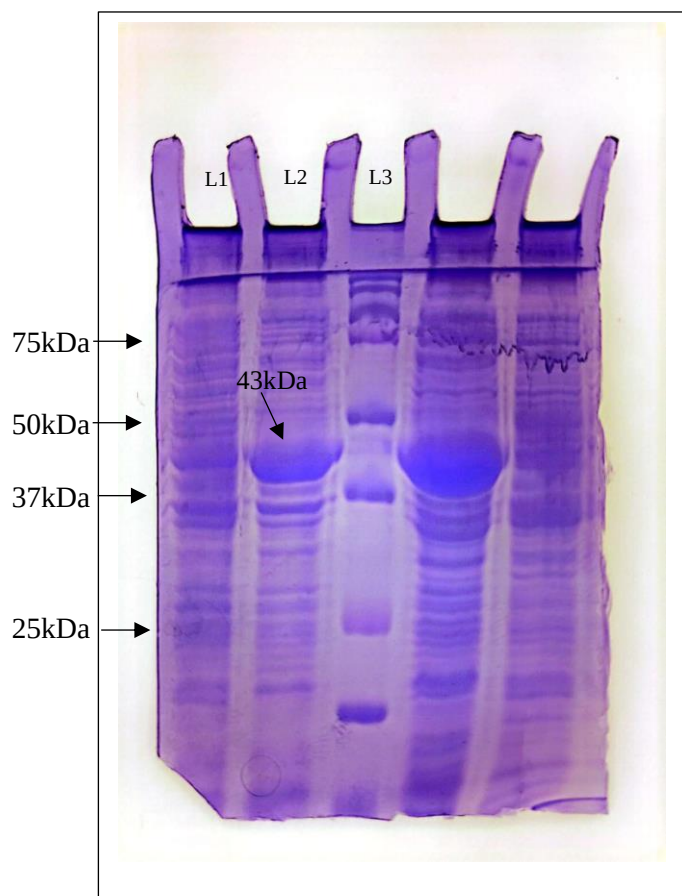
(b)



(c)



Supplementary Fig 4. Uncropped images of supplementary figure 1



Supplementary Fig.5. Uncropped images of supplementary figure 2.