

Fig. S2.

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BamA      MAMKLLIASLLFSSATVYGA-EGFVVKDIHFEGQLQRVAVGAALLSMPVRTGDTVNDEDI
BamA opt  MAMKLLIASLLFSSATVYGASEGFVVKDIHFEGQLQRVAVGAALLSMPVRTGDTVNDEDI
*****

BamA      SNTIRALFATGNFEDVRVLRDGDTLVQVKERPTIASITFSGNKSVKDDMLKQNLASGV
BamA opt  SNTIRALFATGNFEDVRVLRDGDTLVQVKERPTIASITFSGNKSVKDDMLKQNLASGV
*****

BamA      RVGESLDRTTIADIEKGLEDFYYSVGKYSASVKAVVTPLPRNRVDLKLVFQEGVSAEIQQ
BamA opt  RVGESLDRTTIADIEKGLEDFYYSVGKYSASVKAVVTPLPRNRVDLKLVFQEGVSAEIQQ
*****

BamA      INIVGNHAFTTDELISHFQLRDEVPWWNVVGDGRKYQKQKLAGDLETLRSYYLDRGYARFN
BamA opt  INIVGNHAFTTDELISHFQLRDEVPWWNVVGDGRKYQKQKLAGDLETLRSYYLDRGYARFN
*****

BamA      IDSTQVSLTPDKKGIYVTVNI TEGDQYKLSGVEVSGNLAGHSAEIEQLTKIEPGELYNGT
BamA opt  IDSTQVSLTPDKKGIYVTVNI TEGDQYKLSGVEVSGNLAGHSAEIEQLTKIEPGELYNGT
*****

BamA      KVTKMEDDIKLLGRYGYAYPRVQSMPEINDADKTVKLRVNV DAGNRFYVRKIRFEGNDT
BamA opt  KVTKMEDDIKLLGRYGYAYPRVQSMPEINDADKTVKLRVNV DAGNRFYVRKIRFEGNDT
*****

BamA      SKDAVLRREMRQMEGAWLGS DLVDQGKERLNR LGGFFETVDTDTQRVPGSPDQVDVVYKVK
BamA opt  SKDAVLRREMRQMEGAWLGS DLVDQGKERLNR LGGFFETVDTDTQRVPGSPDQVDVVYKVK
*****

BamA      ERNTGSFNFVGIYGTESGVSFQAGVQQDNWLGTGYAVGINGTKNDYQTYAELSVTNPYFT
BamA opt  ERNTGSFNFVGIYGTESGVSFQAGVQQDNWLGTGYAVGINGTKNDYQTYAELSVTNPYFT
*****

BamA      VDGVS LGGRLFY NDFQADDADLSDY TNKSYGTDVTLGFP INEYNSLRAGLGYVHNSLSNM
BamA opt  VDGVS LGGRLFY NDFQADDADLSDY TNKSYGTDVTLGFP INEYNSLRAGLGYVHNSLSNM
*****

BamA      QPQVAMWRYLYSMGEHPSTSDQDNSFKTDDFTFNYGWTYNKLD RGYFPTDGSRVNLTGKV
BamA opt  QPQVAMWRYLYSMGEHPSTSDQDNSFKTDDFTFNYGWTYNKLD RGYFPTDGSRVNLTGKV
*****

BamA      TIPGSDNEYKVTLD TATYVPI DDDHKWVVLGRTRWGYGDGLGGKEMPFYENFYAGGSST
BamA opt  TIPGSDNEYKVTLD TATYVPI DDDHKWVVLGRTRWGYGDGLGGKEMPFYENFYAGGSST
*****

BamA      VRGFQSN TIGPKAVYFPHQASNYDPDYDYECATQDGAKDLCKSDDAVGGNAMAVASLEFI
BamA opt  VRGFQSN TIGPKAVYFPHQASNYDPDYDYECATQDGAKDLCKSDDAVGGNAMAVASLEFI
*****

BamA      TPTPFISDKYANSVRTSFFWDMGT VWD TNWDSSQYSGYPDYSDPSNIRMSAGIALQWMSP
BamA opt  TPTPFISDKYANSVRTSFFWDMGT VWD TNWDSSQYSGYPDYSDPSNIRMSAGIALQWMSP
*****

BamA      LGPLVFSYAQPFFK KYDGDKAEQFQFNIGKTW
BamA opt  LGPLVFSYAQPFFK KYDGDKAEQFQFNIGKTW
*****
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Figure S2. Alignment of the BamA sequences. The figure shows the alignment of the wild-type *E. coli* BamA protein sequence with the codon optimized version of BamA used in the study (BamA opt). Note that the introduction of a *NheI* site into the codon optimized version of *bamA* introduces an additional serine residue after the end of the BamA signal sequence at Ala21. This addition does not affect the activity of BamA.