

**Figure S2.**

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BsaP      MSSII GGASAA-RRGFS IDGTGSAAN---RLDAEPSLDDAPQTGAAGAADVQAQLAGVDE
InvE      ---MIPGSTSGISFSRILSRQTS HQDATQHTDAQQAIEIQQAEDSSPGAEVQKQVQSTDE
MxiC      ---MLDVKNQGVFSSAFIDKLNAMTNSD-----DGDETADAELDSGLANSKYIDSSDE
          ::  ..  .  ::  :  :  :  .  .  :  .  **

BsaP      EAANAAAQFGR- FRASERKGRRSDELERILD TDAD EKLDELAALLGG---RADLATLLR
InvE      -MSAALAQFRNRDYEKKSSNLSNS FERVLEDEALPKAKQILKLSV---HGGALEDFLR
MxiC      -MASALSSF INRRDLEKLGKGTNSDSQERILDGEEDEINHKIFDLKRTLKDNPLDQDFID
          :  *  :.*  .  .:  ..  *:.  **:*:  :  .:  *  :  :

BsaP      DARERFRDESLLLLALRELRRRRLDGESVDALERAIDELLAGDGAKRIKAGINAALKAK
InvE      QARSLFPDPSDLVVLVRELLRRKDL EEIVRKKLESLLKHVEEQ TDPKTLKAGINCALKAR
MxiC      RLKRYFKDPSDQVLALRELLNEKDLTAEQVESLTKIINEII-SGSEKSVNAGINSATQAK
          :  *  *  *  *  :*.*****  ..:  *  .  *  :...  *  :****.*:***:

BsaP      VFGARMQLDARRLRELYRQFLEFDGSHLVIYEDWIEQFGASRRKRILDYVSAALSYDMQS
InvE      LFGKTLSLKPGLLRASYRQFIQSESEVEIYSDWIASYGYQRRLVVLDFIEGSLTDDIDA
MxiC      LFGNKMKLEPQLLRACYRGFIMGNI STTDQYIEWLGNFGFNHRHTIVNFVEQSLIVDMS
          :**  :.*  **  **  *  :  :  *  *:  :.*  .*  :.....  .*  *...

BsaP      HDPSCGAAEFGPLLGLT LHRARMLASADEQFVGRLLDDALARD CGLTEARALATMLGGLQ
InvE      NDASCS-RLEFGQLRRLTQLKMLRSADLLFVSTLLSYFTKAFNAEESWLLMLSLLQ
MxiC      EKPCSN-AYEFGVLSKLI AIKMIRTS DVI FMKKLES SLLKDGSLSAEQLLLTLLYIFQ
          ..  **  ***  :*  *  :*:  ::*  *  *  .  :  :  :  *  :*  :*

BsaP      RPFVADVLLGLT LGDLLEPLAPARRSQLLQLALRAFAGVPIALYGDADARRAALGALEEL
InvE      QPHEVDSLADI IGLNALLLSHKEHASFLQIF YQVCKAIPSSLFYEEYWQEELLMALRSM
MxiC      YPSESEQILTSVIDVSRA--SH-EDSVVYQTYLSSVNESPHDIFKSESEREIATNILREL
          *  .  :.*  :  :  .  :  .  *  *  :  .  .  :  *...

BsaP      IGATYARERRQARPRAD---
InvE      TDIAYKHEMAEQRRRTIEKLS
MxiC      VTSAYKELSR-----
          :*  :*  .

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**Figure S2. Amino acid alignment of *B. pseudomallei* K96243 BsaP with *Salmonella* InvE and *Shigella* MxiC ‘gatekeeper’ proteins.**

Amino acid sequences (BsaP, YP\_111550.1; InvE, NP\_461818.1; MxiC, NP\_085309.1) were aligned using Clustal Omega software (Sievers et al. 2011. Mol. Syst. Biol. 7: 539). Amino acid conservation is indicated as fully conserved (\*), or having strongly similar (:), or weakly similar properties (.).