A

```
FlaB1   1:--MIINHNVSAIFAHRTLKSNDANLSKDIEKLSSGMRINKAGDDASGLAVSEKMRTQIAG 58
FlaB2   1:--MIINHNLAAINSHRVLKFQNEEVSKNMEKLSSGMRINRAGDDASGLAVSEKMRTQVNG 58
FlaB3   1:--MIINHNMSAIQSHRALKFTQWDVDKTMRNLSTGQRINLAGDDASGLAVSEKLRTQIRG 58
FlaB4   1:VTMIINHNISALVAKRALSNTSRDMDKSMEHLATGMRINRPGDDSLGFSVSEKLRSQIRA 60
             ****** .*.  .* *.       * .. *. *.*** .***..*..**** *.*. .

FlaB1  59:LRRAEQNTEDGMSLIQTAEGYLQETHEIVQRVRVLAVQAANGIYSEEDRQQIQVEVSQLV 118
FlaB2  59:LRQAERNTEDGMSLIQTTEGFLQESNDIIQRIRTLAIQSSNGIYTEEDRQMIQVEVSQLI 118
FlaB3  59:LRQAERNTEDGLSFIQTAEGYLDQSAEIIQRIRTLAIQTSNGIYTPEDRQLVQVEVSALV 118
FlaB4  61:LGQAERNTQDGMSFLQVTEGSLDQVNSILQRLRELSVQSANGIYSDEDRKLVQLEVSQLV 120
          *..**.**.**.* .*. ** *     * ** * *. *  ****  ***.  *.***.*.

FlaB1 119:DEIDRIASQAEFNKMKLLTGAFARLNPTASMWFHIGANMHQRERVYIETMNTAALGLRNP 178
FlaB2 119:DEVDRIASQAEFNKMNLLQGDFARGSRATSMWFHIGPNMHQRERVFIATMTARSLNLKGQ 178
FlaB3 119:DEIDRIASQAEFNKMKLFEGDFARKSTKASMWFHMGANARQRERFYIGTMTSKALKMSEG 178
FlaB4 121:EEVERIGTSAEFNKVKPLDGRFSRAN-KNPMTLQVGANGTEKIEVYINTMTSSSLKLKQA 179
          .* .**...*****.... * *.*     .*... *.*  ......* **.   * .

FlaB1 179:TVLTFISLSTAGKANSVIGLCDDALRVISKQRADLGAYYNRMEHAAKGLMNAYENTQASE 238
FlaB2 179:SG-ELLSLSTADKSNDAIGTLDAALTRISKQRANLGAYFNRLEHAAKGLMNAYENTQASE 237
FlaB3 179:AI--KIALSTPGKADEAIAKADFALNKIMKQRADMGAYQNRLESTAKGLMGAYENMQASE 236
FlaB4 180:GN--KLTLSTPNKASDSLQVLDDAISKVNRLRSDLGAYYNRLDLTLKSLSNNYVNMVSSE 237
                 ***  *.   .   * *.  . ..*...*** **..  .*.*...*.* ..**

FlaB1 239:SRIRDTDMAEQMTSFTRYQILTQAATSMLAQANMKSQSVMRLLQ---              282
FlaB2 238:SRIRDADMAEETVAFTKNQILVQSGTAMLAQANVRPQGVLSLLR---              281
FlaB3 237:SRIRDADMAEEMVALTTKQILVQSGTAMLAQASLRPNSVLRLLNNT-              282
FlaB4 238:SQIRDADMATEMVEYSKNQILTKSGVAMLAQANLRPESVVKLLTDRY              284
          *.***.***....  .  *** .....*****. .. .*  **
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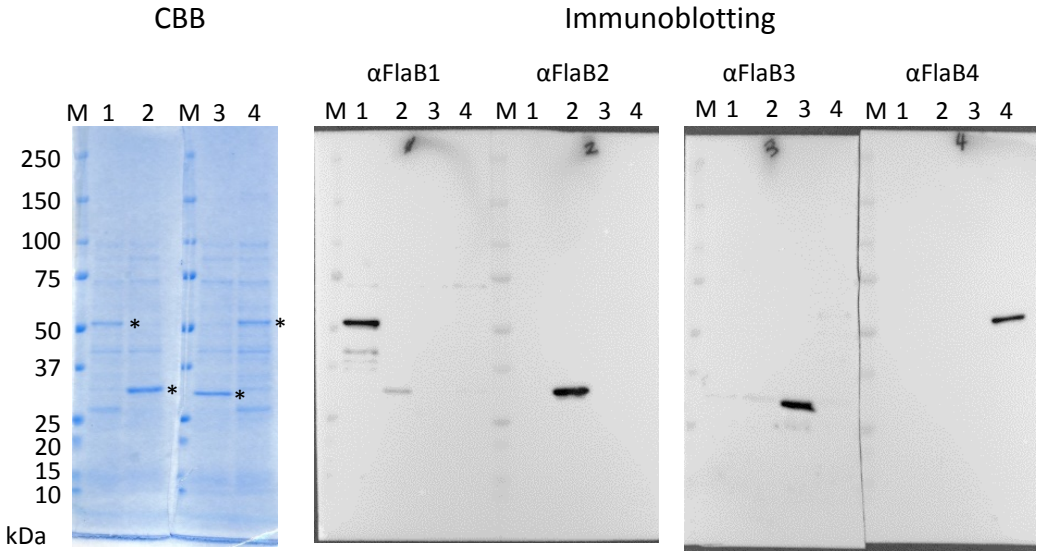
B



S1 Fig. Locations of peptide fragments (indicated in red) used for the preparation of antiserum for each FlaB protein (A) and the specificity of each anti-FlaB antiserum (B).