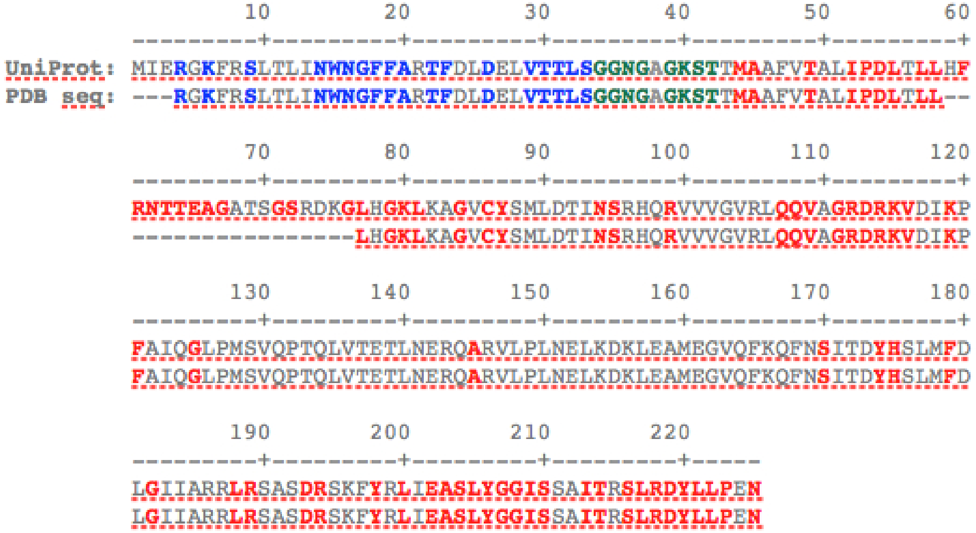
Supporting Information Text S3:
MukB supplementary figures



```
                   10        20        30        40        50        60
          ---------+---------+---------+---------+---------+---------+
UniProt:  MIERGKFRSLTLINWNGFFARTFDLDELVTTLSGGNGAGKSTTMAAFVTALIPDLTLLHF
PDB seq:  ---RGKFRSLTLINWNGFFARTFDLDELVTTLSGGNGAGKSTTMAAFVTALIPDLTLL--

                   70        80        90       100       110       120
          ---------+---------+---------+---------+---------+---------+
          RNTTEAGATSGSRDKGLHGKLKAGVCYSMLDTINSRHQRVVVGVRLQQVAGRDRKVDIKP
          ----------------LHGKLKAGVCYSMLDTINSRHQRVVVGVRLQQVAGRDRKVDIKP

                  130       140       150       160       170       180
          ---------+---------+---------+---------+---------+---------+
          FAIQGLPMSVQPTQLVTETLNERQARVLPLNELKDKLEAMEGVQFKQFNSITDYHSLMFD
          FAIQGLPMSVQPTQLVTETLNERQARVLPLNELKDKLEAMEGVQFKQFNSITDYHSLMFD

                  190       200       210       220
          ---------+---------+---------+---------+-----
          LGIIARRLRSASDRSKFYRLIEASLYGGISSAITRSLRDYLLPEN
          LGIIARRLRSASDRSKFYRLIEASLYGGISSAITRSLRDYLLPEN
```

Figure 1: **MukB protein: partitions indicated on the sequence.**

Blue, green and red amino-acids correspond to MukB partitions obtained by running BIS (on blocks) over 200 sequences for $d = 0$ and $d = 1$ (with $\Delta = 0.05$) and highlighted in Fig. 3 in the main text. The pdb sequence (`1qhl:A`) is aligned against the UniProt sequence P22523 (*Escherichia coli* MukB).

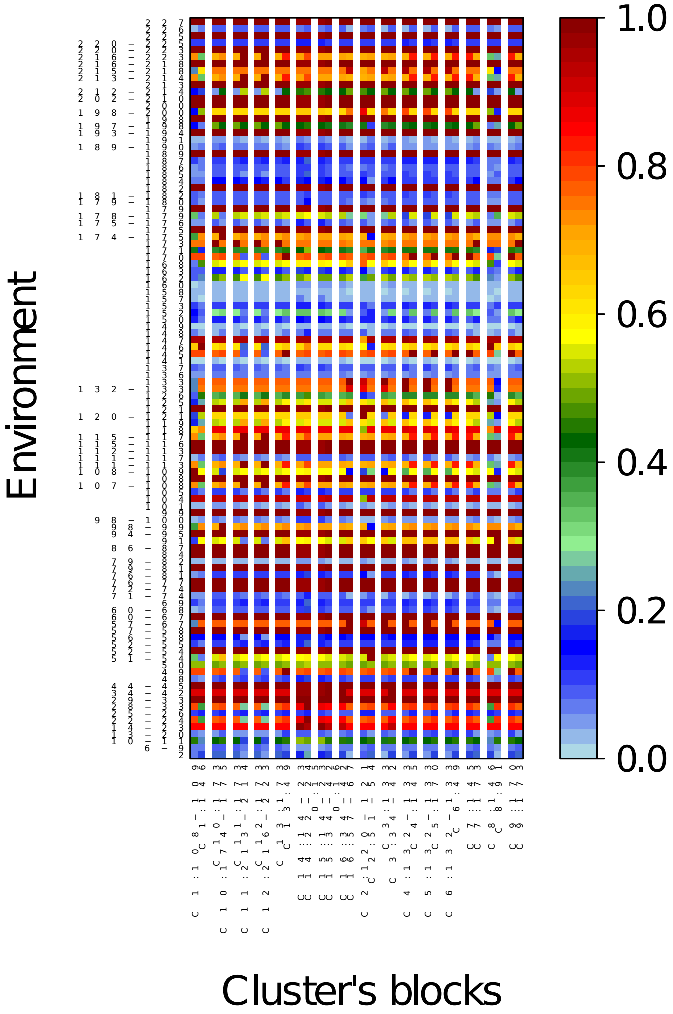


Figure 2: **MukB protein: clusters for $d = 1$ that are not clusters for d_1^+.**

Clusters of the MukB score matrix that are detected by CLAG for $d = 1$ but that are not detected for d_1^+ (that is, $d \leq 1$). (Notice that not all clusters for $d = 1$ are reported.) This is due to the environment (that is, the set of blocks) for $d = 1$ that differs from the one for $d \leq 1$. Recall that the environment for $d \leq 1$ contains all blocks for $d = 0$ and all blocks for $d = 1$.

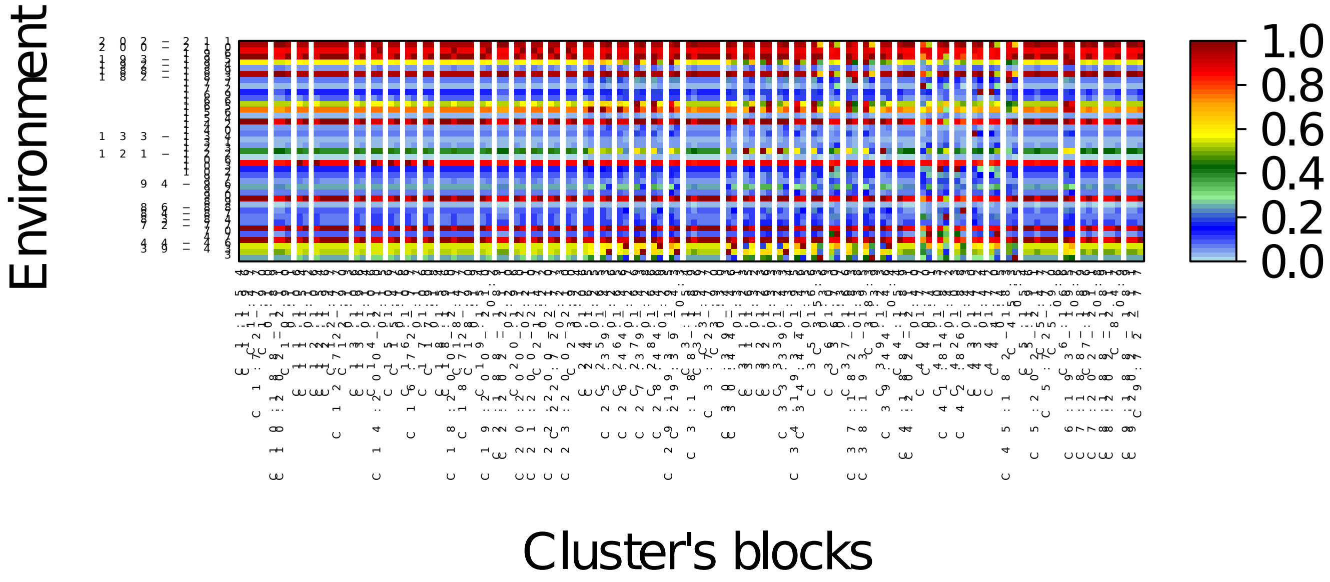


Figure 3: **MukB protein: clusters for d_1^+ that are not clusters for $d = 1$.**
See legend in Fig. 2-Text S3.