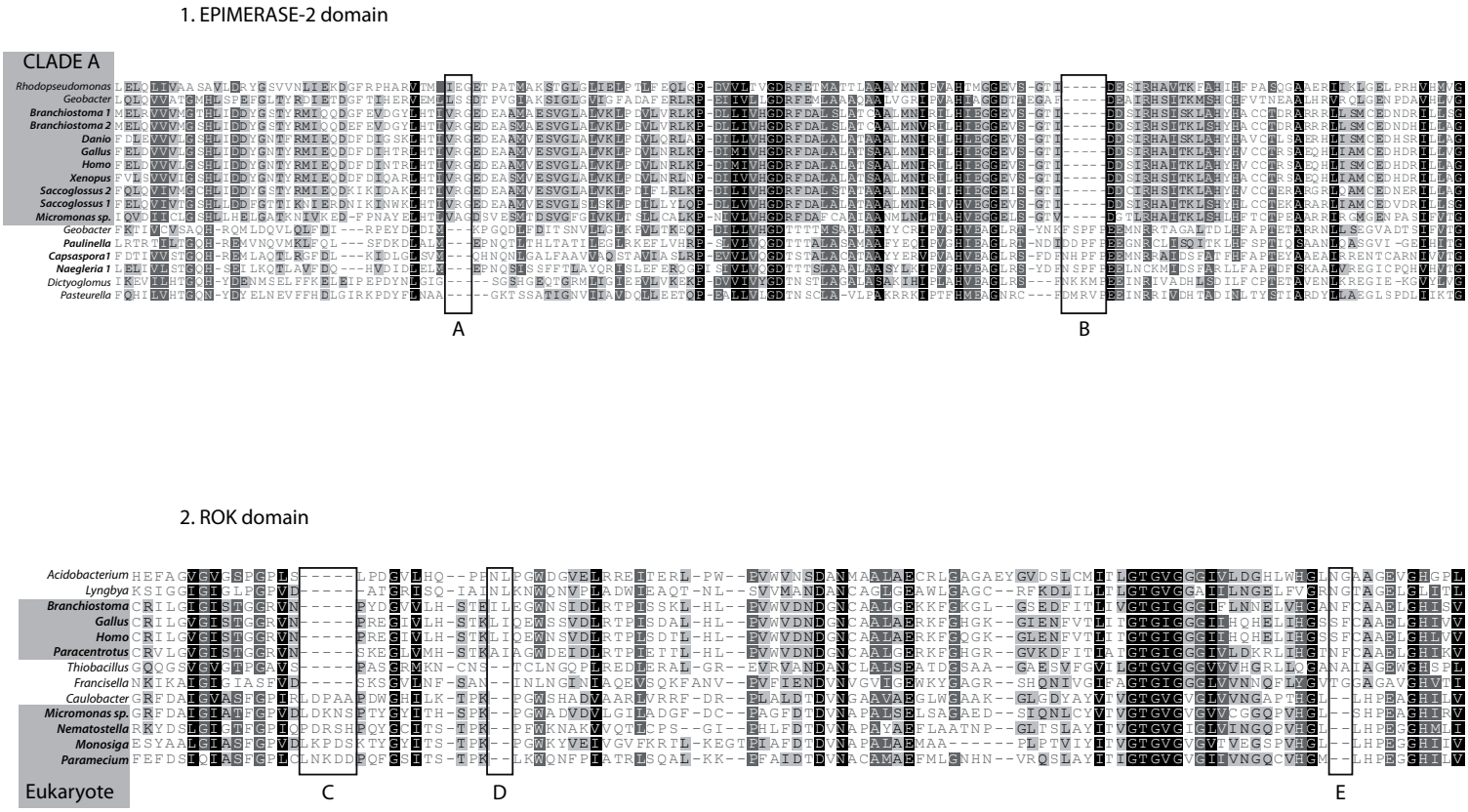

Figure S2. A) Alignment of Epimerase-2 domains with bacterial and eukaryotes representatives from both major clades (A and B, see Figure 2). Indel A is especific to clade A, while indel B is specificic to clade B. Greyscale aminoacids show similarity (as obtained in Geneious 5.3). B) Alignment of ROK domains, with some bacterial and eukaryotes representatives. *Caulobacter* is an eubacteria sequence that groups with the eukaryote clade. C is specific to Eukaryote clade, while D and E are specific to the Deuterostomata+Prokaryote clade. Greyscale aminoacids show similarity (as obtained in Geneious 5.3).