

|                                   | 460                                 | 470 | 480 | 490 |
|-----------------------------------|-------------------------------------|-----|-----|-----|
| <b>A</b>                          |                                     |     |     |     |
| <i>Camp. lari</i>                 | YVVAWWDYGYPI RYYSDVKTLI DGGKHL GKDN | 490 |     |     |
| <i>Camp. jejuni</i>               | YVVTWWDYGYPV RYYSDVKTLDGGKHL GKDN   | 484 |     |     |
| <i>Camp. coli</i>                 | YVVTWWDYGYPI RYYSDVKTLDGGKHL GKDN   | 485 |     |     |
| <i>Camp. showae</i>               | YVLAWWDYGYPI RYYADVKTLDGGKHL GRDN   | 566 |     |     |
| <i>Camp. hominis</i>              | YTLSWWDYGYPI RYYSDTKTLI DGGKHL GNDN | 506 |     |     |
| <i>Camp. upsaliensis</i>          | YI VAWWDYGYPI RYYSDVKTLDGGKHL GKDN  | 561 |     |     |
| <i>Sulf.mon. autotroph.</i>       | YVI SWWDYGYPI RYYADVKTLDGGKHNGAVN   | 498 |     |     |
| <i>Sulf.spir. deleyianum</i>      | YVVSWWDYGYPL RYYSDVKTLDGGKHSGEVN    | 482 |     |     |
| <i>Sulf.curv. kujiense</i>        | YVVGWWDYGFPI RYYANVKTLDGGAQHSGGQN   | 479 |     |     |
| <i>Wol. succinogenes</i>          | YVMAWWDYGYGL RYYSDVKTLDGAKHAGNI N   | 483 |     |     |
| <i>Cam.bact. mediatlant.</i>      | YVVTWWDYGYPI RYYAHTKTLDGGKHSAGDN    | 476 |     |     |
| <i>Helic. canadensis</i>          | YALAWWDYGYW GYFAKLNVFI DGGKHSGRDN   | 460 |     |     |
| <i>Nitratiruptor sp.</i>          | YAI TWWDYGYPI WYADVNTLI DGGKH- EDN  | 494 |     |     |
| <i>Deferribact. desulf.</i>       | AI VSWWDYGYAI EDI VGFPVYHDGGSQGSPT  | 456 |     |     |
| <i>Desulf.micro. baculatum</i>    | LL VQWWDYGYAGQYYAERTVFGDGSRSQGPVL   | 491 |     |     |
| <i>Desulfovibrio vulgaris</i>     | MVW WWDWGYSAHHFAHRRTI ADGASHGGPSL   | 539 |     |     |
| <i>Desulfovibrio piger</i>        | TLWL WWDWGYAAHHFARRLT ADGARNAGAPL   | 533 |     |     |
| <i>Desulf.bact. thermolith.</i>   | W WT WWDYGTAEYLAGRAVFHDGGSQGSPT     | 468 |     |     |
| <i>Calditerrivib. nitroreduc.</i> | PVFTWWDYGYALMDI GEFSVYHDGGVHGADRS   | 463 |     |     |
| <i>Cand. Puniceisp. marin.</i>    | VI ASWWDYGYMATFL SDMPSL HDGGTQTSPVT | 525 |     |     |
|                                   | ↑↑↑ ↑ ↑ ↑ ↑ ↑↑↑                     |     |     |     |

**B**

