**Supplementary Table 1**: Secondary structure proportions of *Af*AA9\_B and *Af*Cel6A from literature and different prediction methods in comparison with the one determined by BeStSel based on the CD spectra.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | *Af*AA9\_B | | | | *Af*Cel6A | | |
| BeStSel  (CD) | PDB: 5X6A | Phyre2 | Kabsch & Sander | BeStSel  (CD) | Phyre2 | Kabsch & Sander |
| α-helix (%) | 8.3 | 12.7 | 1.0 | 10.9 | 27.0 | 28.0 | 30.3 |
| β-strand (%) | 31.4 | 31.4 | 40.0 | 29.3 | 7.7 | 10.0 | 10.8 |
| Turns (%) | 11.9 | - | - | - | 12.8 | - | - |
| Others (%) | 48.4 | 55.9 | 59.0 | 59.8 | 52.8 | 62.0 | 58.9 |