

## Supplementary material

# Structural differences between mesophilic, moderately thermophilic and extremely thermophilic protein subunits: results of a comprehensive survey

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### Supplementary materials and methods

#### *The final data set*

The final data set, containing 64 mesophilic and 29 thermophilic subunit structures in 25 protein families, is given below. For each family, the family name and abbreviation (used in Figure 7) are shown in bold type and the PDB identifiers with subunit identifiers (where applicable) of the structures follow. Thermophilic structures are indicated in italic type and the optimum growth temperature (in °C) of the source organism is given for each one.

1. **Transcription initiation factor IIb (TIF-2B)**: 1volA, *1aisB/100*;
2. **Superoxide dismutase (SOD)**: 1abmA, 1ar4A, 1idsA, 1isaA, 1vewA, *3mdsA/75*; 3. **Glutamate dehydrogenase (Glu-DH)**: 1hrdA, *1gtmA/100*; 4. **Malate dehydrogenase (MDH)**: 4mdhA, *1bmdA/72.5*;
5. **Phycocyanin alpha chain (Phyc-a)**: 1cpcA, 1liaA, 1allA, *1phnA/45*;
6. **Signal recognition particle (receptor) (SRP)**: 1fts, *1ffh/72.5*;
7. **Ferredoxin**: 1fxd, 1fxrA, *1vjw/80*; 8. **Subtilisin**: 1sup, 1cseE, 1bh6, 1svn, 2pkc, 1sbnE, 1meeA, *1thm/60*; 9. **Neutral protease (thermolysin) (NPR)**: 1npc, *1lnfE/52.5*; 10. **Rubredoxin**: 1iro, 1rdg, 6rxn, 8rxnA, *1caal/100*; 11. **Cyclodextrin glycosyltransferase (CGTase)**: 1cdg, 1cgt, 1pamA, *1ciul/60*, *1cyg/52.5*; 12. **Phycocyanin beta chain (Phyc-b)**: 1allB, 1cpcB, 1liaB, *1phnB/45*; 13. **3-phosphoglycerate kinase (PGK)**: 1qpg, *1php/52.5*, *1vpe/80*; 14. **Glyceraldehyde-3-phosphate dehydrogenase (GAPDH)**: 1a7kA, 1gadO, 1szjG, *1gd1O/52.5*, *1hdgO/80*; 15. **Xylanase (I) (Xyl-1)**: 1enxA, 1ukrA, 1xnb, 1xnd, 1xyn, *1yna/45*; 16. **Xylanase (II) (Xyl-2)**: 1clxA, 2exo, *1xyzA/60*; 17. **TATA box binding protein (TATA-BP)**: 1cdwA, 1vokA, *1pczA/100*; 18. **Adenylate kinase (ADK)**: 1ak2, 2ak3A, 1aky, 1ukz, 1akeA, 3ukd, *1zip/52.5*; 19. **Carboxypeptidase (CP)**: 2ctc, 1nsa, 1pca, *1obr/55*; 20. **Ornithine carbamoyltransferase (OCT)**: 2otcA, *1a1s/100*; 21. **Pyrophosphatase (PPase)**: 1obwA, *2prd/72.5*;
22. **CheY protein (CheY)**: 3chy, 2chf, *1tmy/80*; 23. **Glutathione / trypanothione reductase (G/T reduct.)**: 1aogA, 1febA, 1gerA, 3grs, *1ebdA/52.5*; 24. **Phosphofructokinase (PFK)**: 1pfkA, *4pfk/52.5*;
25. **Triacylglycerol acylhydrolase (TAGAH)**: 1gyA, *1tib/50*, *3tgl/45*.



