**Table 2S.** Data computed from the MSA containing 310 sequences of diverse TFPs.

| Case | Residues | Conservation/Divergence/Similarity | | | Comments |
|------|----------|------|------|------|----------|
| 1 | L1,E2,C3,H4 | 0.65 | 0.51 | 0.54 | β-strand 1 (F1) |
| 2 | T14,K15,T16,C17 | 0.64 | 0.51 | 0.55 | β-strand 2 (F1) |
| 3 | C23,Y24,K25,K26,V27,W28,R29 | 0.54 | 0.56 | 0.42 | β-strand 3 (F2) |
| 4 | I35,I36,E37,R38,G39,C40 | 0.60 | 0.50 | 0.40 | β-strand 4 (F2) |
| 5 | K50,L51,N52,C53,C54 | 0.68 | 0.42 | 0.56 | β-strand 5 (F3) |
| 6 | D57,K58,C59,N60,N61 | 0.74 | 0.32 | 0.53 | C-terminal |
| 7 | C3 | 1.00 | | | Cys-1 (Db1) |
| 8 | C17 | 0.99 | | | Cys-1 (Db2) |
| 9 | C23 | 0.99 | | | Cys-2 (Db1) |
| 10 | C40 | 0.98 | | | Cys-2 (Db2) |
| 11 | C42 | 0.96 | | | Cys-1 (Db3) |
| 12 | C53 | 0.95 | | | Cys-2 (Db3) |
| 13 | C54 | 0.99 | | | Cys-1 (Db4) |
| 14 | C59 | 1.00 | | | Cys-2 (Db4) |
| 15 | C59,N60 | 0.98 | | | C-terminal CN |

The sequence conservation was calculated using the sequence of P01426 (short neurotoxin from *Naja nigricollis*) as reference and the Blosum30 matrix. Divergence and similarity scores were calculated using the AAC derived from the human genome database containing 28243 entries.