

Table 1 Suppl. The copy number of *calcineurin B-likes (CBLs)* and *CBL-interacting kinases (CIPKs)* paralogs identified in *Solanum tuberosum*, *S. commersonii*, and *S. chacoense*.

| Genes                 | <i>S. tuberosum</i> | <i>S. commersonii</i> | <i>S. chacoense</i> |
|-----------------------|---------------------|-----------------------|---------------------|
| <i>CBL1</i>           | 1                   | 1                     | 1                   |
| <i>CBL2</i>           | 1                   | 1                     | 1                   |
| <i>CBL3</i>           | 1                   | 1                     | 1                   |
| <i>CBL4</i>           | 2                   | 2                     | 2                   |
| <i>CBL5</i>           | 2                   | 1                     | 1                   |
| <i>CBL8</i>           | 1                   | 2                     | 1                   |
| <i>CBL9</i>           | 1                   | 1                     | 1                   |
| <i>CBL10</i>          | 1                   | 1                     | 1                   |
| <i>CIPK1</i>          | 1                   | 1                     | 1                   |
| <i>CIPK2</i>          | 1                   | 1                     | 1                   |
| <i>CIPK3</i>          | 1                   | 2                     | 2                   |
| <i>CIPK4</i>          | 1                   | 1                     | 1                   |
| <i>CIPK5</i>          | 1                   | 1                     | 2                   |
| <i>CIPK6</i>          | 2                   | 2                     | 2                   |
| <i>CIPK7</i>          | 1                   | 1                     | 1                   |
| <i>CIPK8</i>          | 1                   | 1                     | 1                   |
| <i>CIPK9</i>          | 1                   | 1                     | 1                   |
| <i>CIPK11</i>         | 2                   | 2                     | 2                   |
| <i>CIPK14</i>         | 2                   | 2                     | 2                   |
| <i>CIPK16</i>         | 1                   | 1                     | 1                   |
| <i>CIPK17</i>         | 1                   | 1                     | 1                   |
| <i>CIPK20</i>         | 2                   | 2                     | 2                   |
| <i>CIPK22</i>         | 1                   | 1                     | 1                   |
| <i>CIPK23</i>         | 1                   | 1                     | 1                   |
| <i>CIPK24</i>         | 1                   | 1                     | 1                   |
| <i>CIPK25</i>         | 1                   | 1                     | 1                   |
| <i>CIPK_specific1</i> | 1                   | 1                     | 1                   |
| <i>CIPK_specific2</i> | 1                   | 1                     | 1                   |
| <i>CIPK_specific3</i> | 1                   | 1                     | -                   |
| <i>CIPK_specific4</i> | 1                   | -                     | -                   |

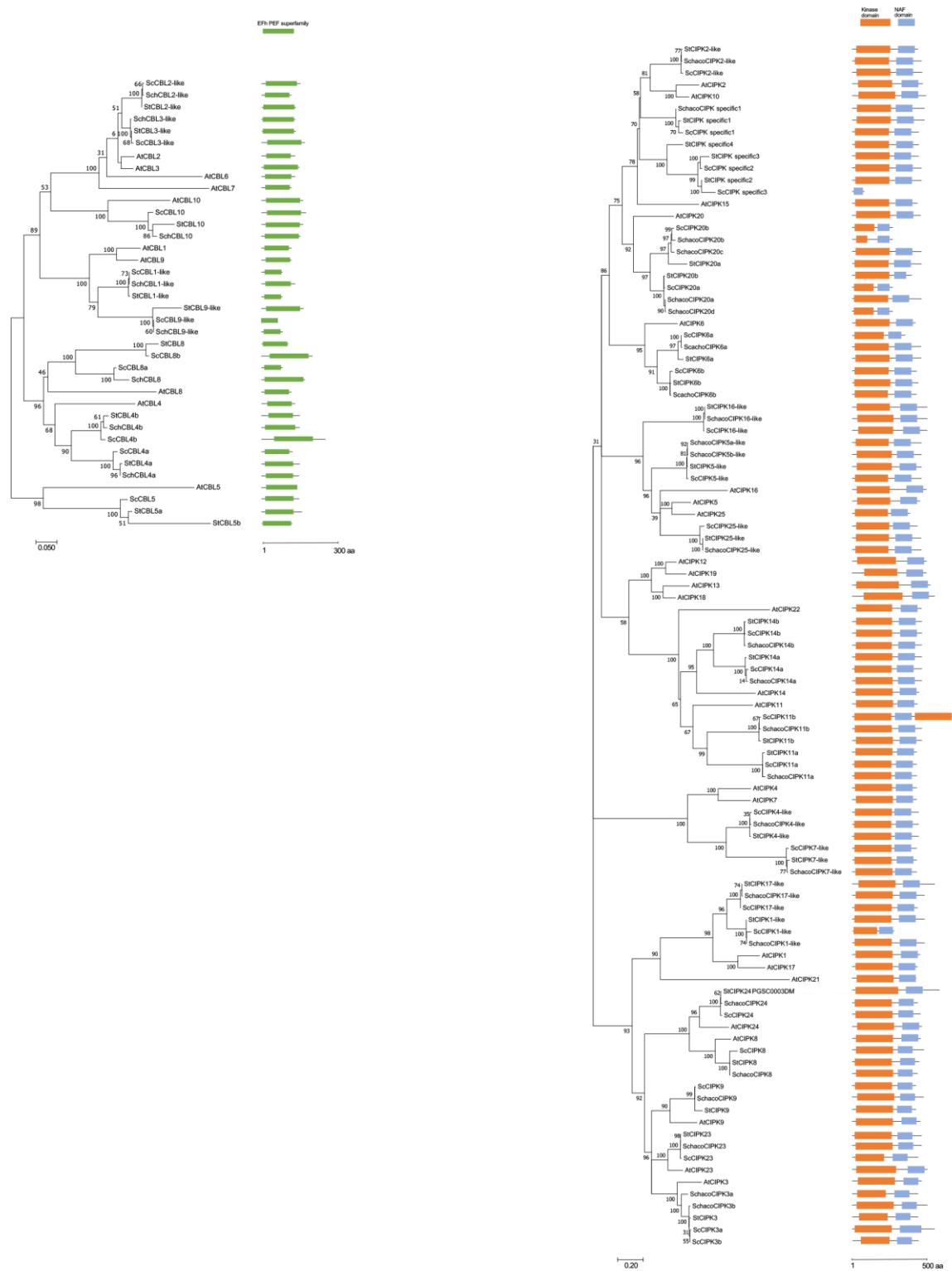


Fig. 1 Suppl. Phylogenetic analysis of calcineurin B-like (CBL) (left) and CBL-interacting kinase (CIPK) (right) gene families in *Solanum commersonii*, *S. chacoense*, *S. tuberosum*, and *A. thaliana*. Full length protein sequences of CBLs and CIPKs were used to construct maximum likelihood trees by using the MEGA7.0 software with a bootstrap value of 100. The EF hand domains distinguishing CBLs are merged and showed as a single green bar. The N-terminal kinase and the conserved NAF domains of CIPKs are showed as orange and blue bars, respectively.

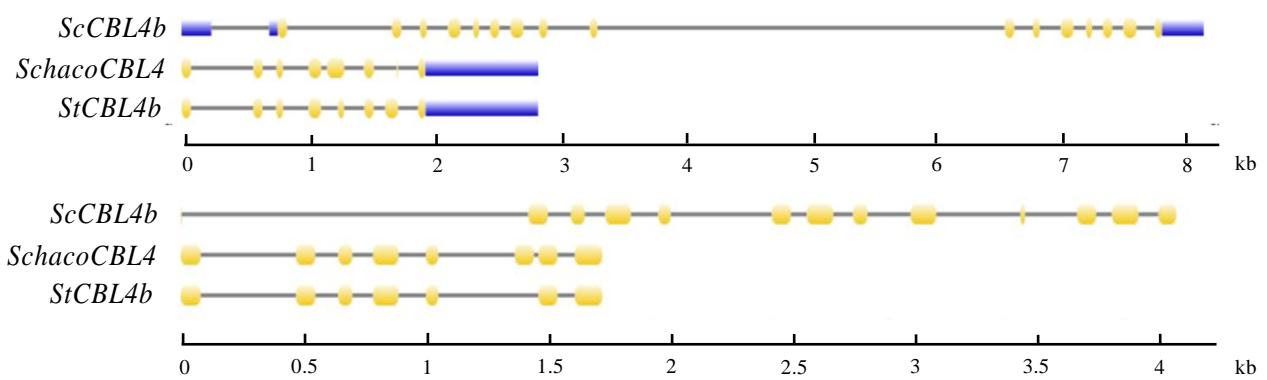


Fig 2 Suppl. The gene structure of *Solanum commersonii*, *S. tuberosum*, and *S. chacoense calcineurin B-like (CBL) 4b and CBL8b*. The number of different exons and their length are also shown. Exons are shown by yellow boxes and untranslated regions by blue boxes.