**Table S8:** Genes predicted to encode for Violaxanthin-Chlorophyll binding proteins (VCP) in CCMP1779 genome and there designation in the phylogenetic tree (Fig. 6).

|  |  |  |
| --- | --- | --- |
| **Name in Tree** **(Fig. 6)** | **ID** | **LHC-Type** |
| 1 | CCMP1779\_8367-mRNA-1 | F-type |
| 2 | CCMP1779\_4699-mRNA-1 | F-type |
| 3 | CCMP1779\_3700-mRNA-1 | R-type |
| 4 | CCMP1779\_10562-mRNA-1 | R-type |
| 5 | CCMP1779\_10564-mRNA-1 | F-type |
| 6 | CCMP1779\_9414-mRNA-1 | R-type |
| 7 | CCMP1779\_11954-mRNA-1 | R-type |
| 8 | CCMP1779\_6809-mRNA-1 | LHCSR-like |
| 9 | CCMP1779\_6828-mRNA-1 | R-type |
| 10 | CCMP1779\_11487-mRNA-1 | R-type |
| 11 | CCMP1779\_8196-mRNA-1 | R-type |
| 12 | CCMP1779\_11886-mRNA-1 | R-type |
| 13 | CCMP1779\_8305-mRNA-1 | R-type |
| 14 | CCMP1779\_6226-mRNA-1 | LHCSR-like |
| 15 | CCMP1779\_35-mRNA-1 | R-type |
| 16 | CCMP1779\_904-mRNA-1 | R-type |
| 17 | CCMP1779\_10420-mRNA-1 | R-type |
| 18 | CCMP1779\_5333-mRNA-1 | R-type |
| 19 | CCMP1779\_6137-mRNA-1 | F-type |
| 20 | nanno\_220:23958..25565 1 | R-type |

 1 ambiguous structural annotation, genome coordinates given