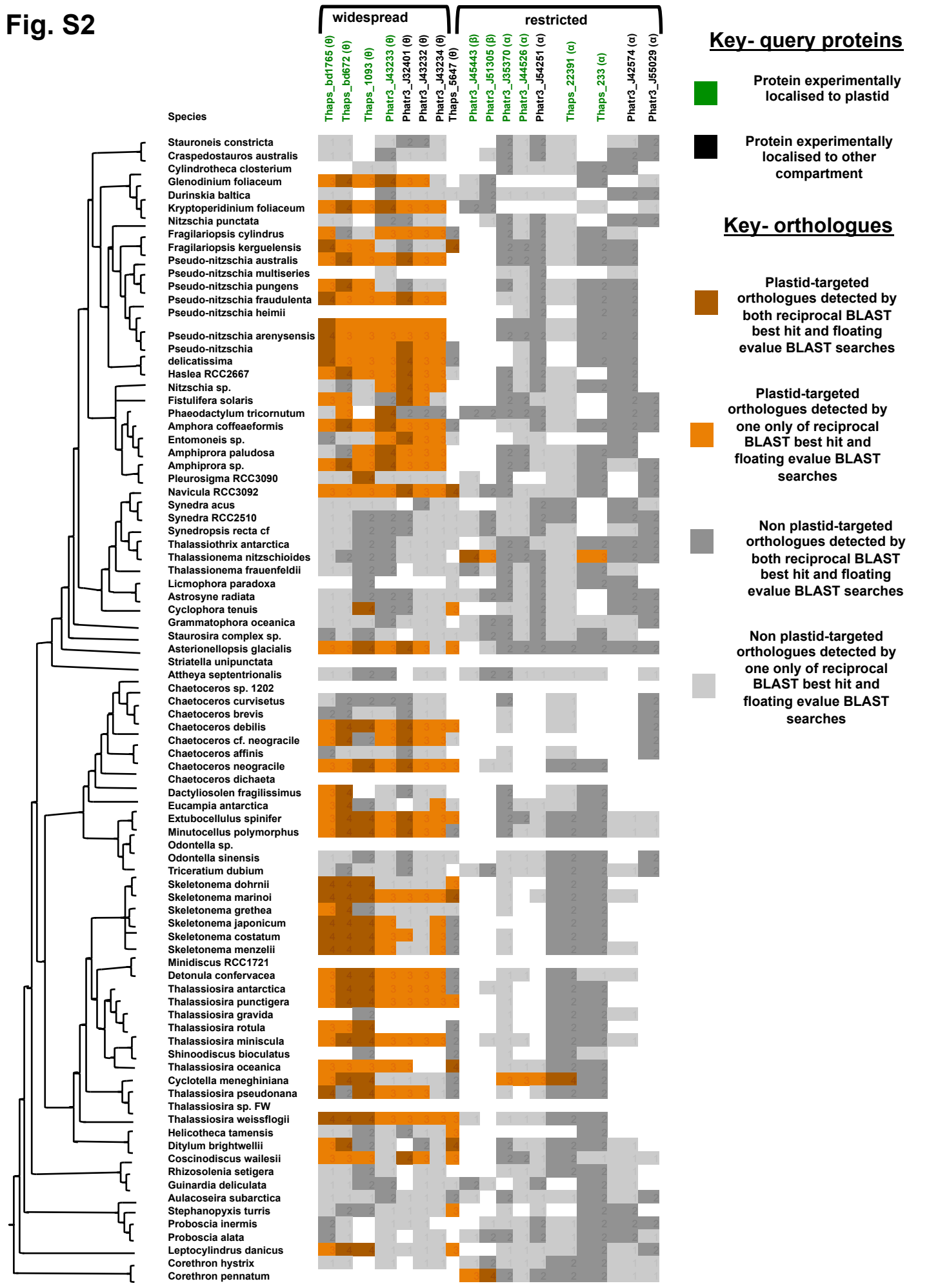

Figure S2. Evolutionary distribution and localisation of diatom carbonic anhydrases. This figure shows the evolutionary distribution of orthologues of experimentally localised carbonic anhydrases from the model diatoms *P. tricornutum* and *T. pseudonana* [41, 72, 98], as inferred by reciprocal BLAST best hit and floating threshold evalue BLAST searches. Query proteins are labelled per structural type of carbonic anhydrase (alpha, beta, or theta); and their experimental localisation (chloroplast, or other compartments e.g., cytoplasm, endomembrane system, and mitochondria). Orthologoues are shaded according to their inferred localisation, based on *in silico* prediction, and whether they are detected by both or only one of the two BLAST strategies employed. Diatom species are ordered following previously published phylogenies [26]. Further details on the carbonic anydrases identified are provided in Table S2.