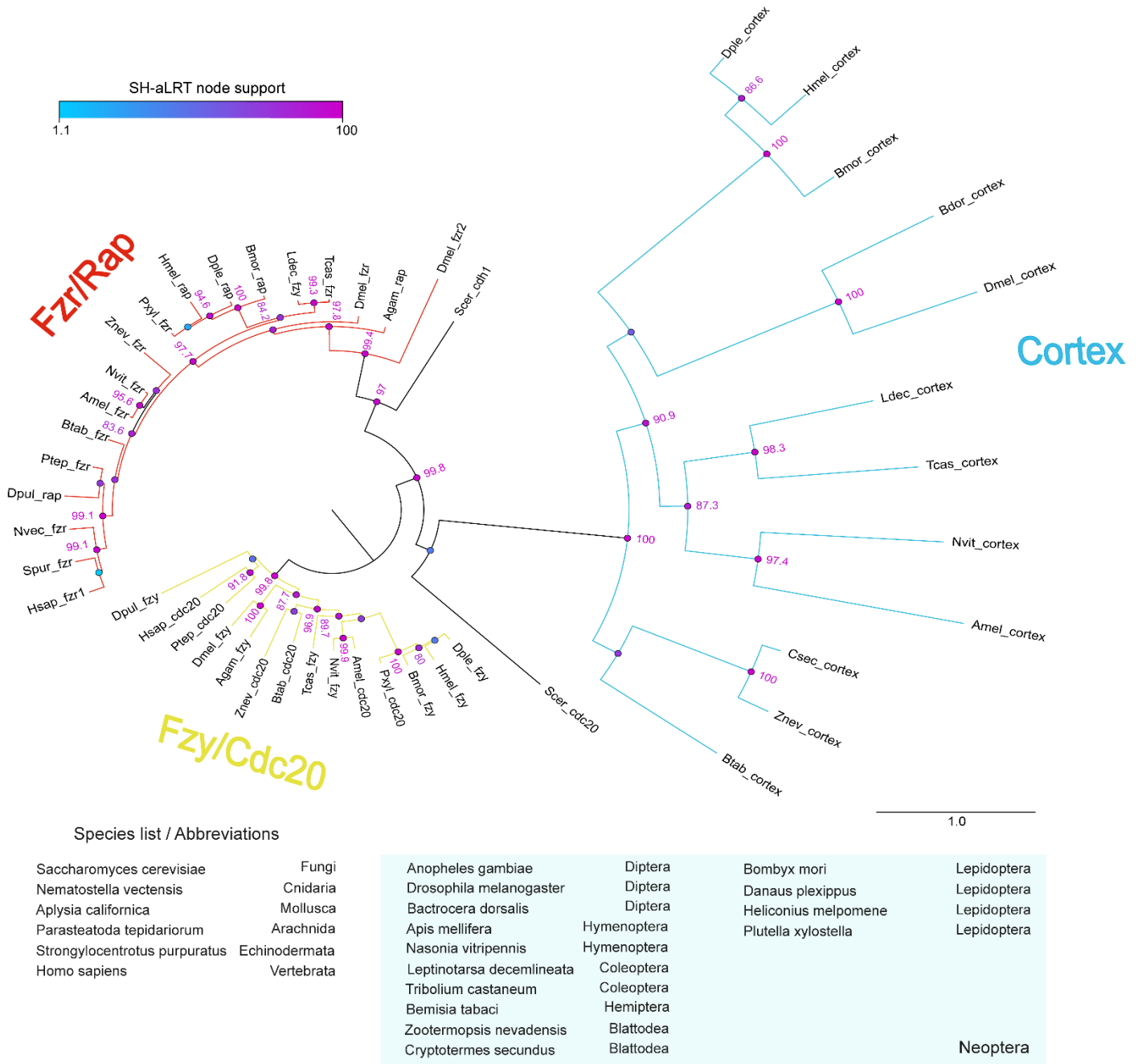
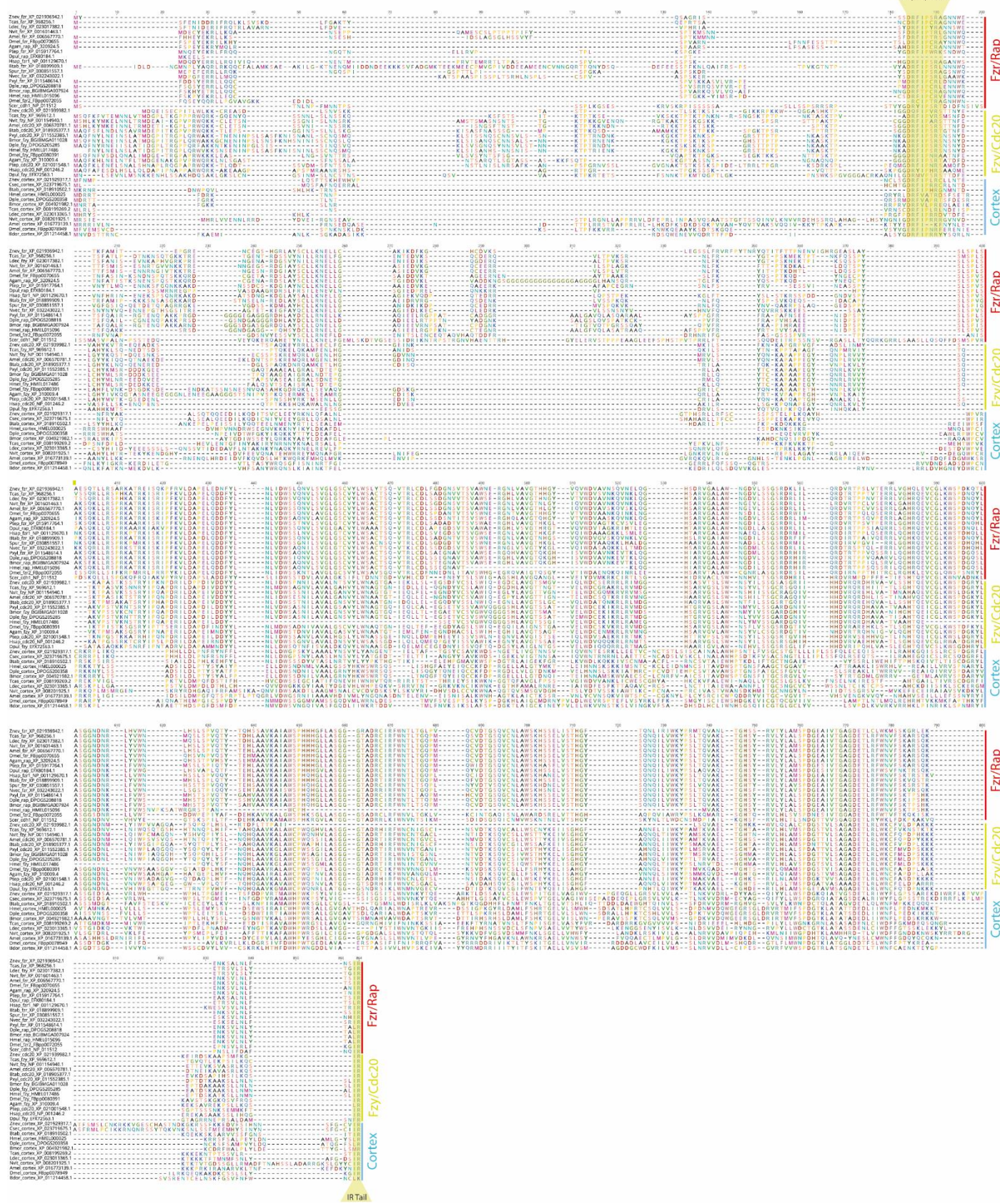


Supplementary File 5: Cortex is a derived and insect-specific derivative of Cdc20.



Supplementary File 5 - Figure S5.1. Phylogenetic analysis of the *cdc20/cdh1* family reveals Cortex is a derived and insect-specific derivative of *cdc20*. Full-length protein homologs retrieved from TBLASTN searches were used to generate a curated alignment with MAFFT/Guidance2 with a column threshold of 0.5. TBLASTN searches against arthropod genome and transcriptome NCBI repositories did not recover Cortex homologues outside of the Neoptera lineage. The maximum-likelihood tree was constructed with W-IQ-TREE with the “Auto” function to find a best-fit model of substitution. Colour circles indicate the scores of SH-like approximate likelihood ratio tests (SH-aLRT) computed over 1,000 replicates, with numeric values for scores > 80. Scale bar indicates amino-acid substitutions per site. Abbreviations: fzy, fizzy ; fzr, fizzy-related ; rap, retina aberrant pattern (syn. fzr).



Supplementary File 5 - Figure S5.2. Cdc20 family protein alignments used to build the phylogenetic tree in supplementary figure S5.1 (see legend for abbreviations). The conserved C-box motif, necessary for interaction with the APC/C and the IR are highlighted.