



**Figure S1** The phylogenetic tree of PtoCesA4 with CesAs of the other plants. Pto, *Populus tomentosa*; Ptr, *Populus trichocarpa*; At, *Arabidopsis thaliana*; Eg, *Eucalyptus grandis*; Os, *Oryza sativa*; Zm, *Zea mays*. Scale bar represents genetic distance.