

2 Figure S1. Phylogenetic evolutionary tree, motifs distributions, and domains of the subclass Ib

3 subfamily members.

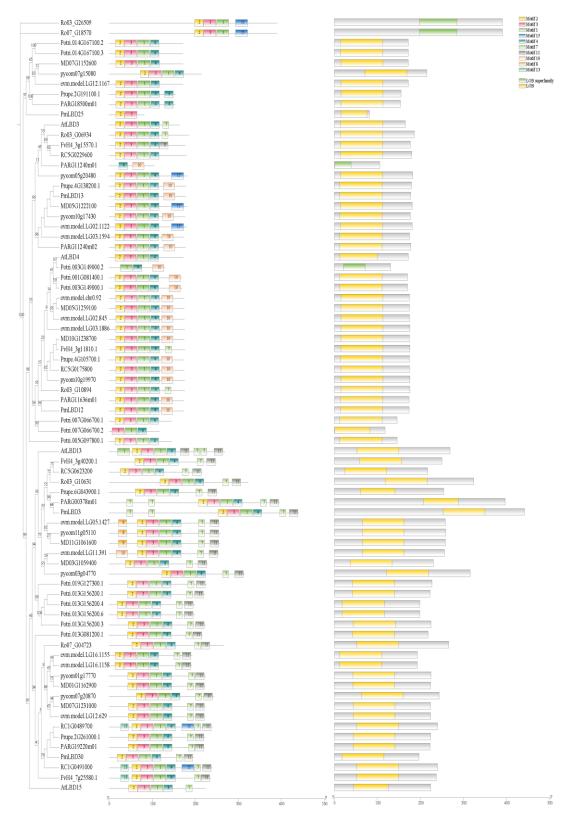
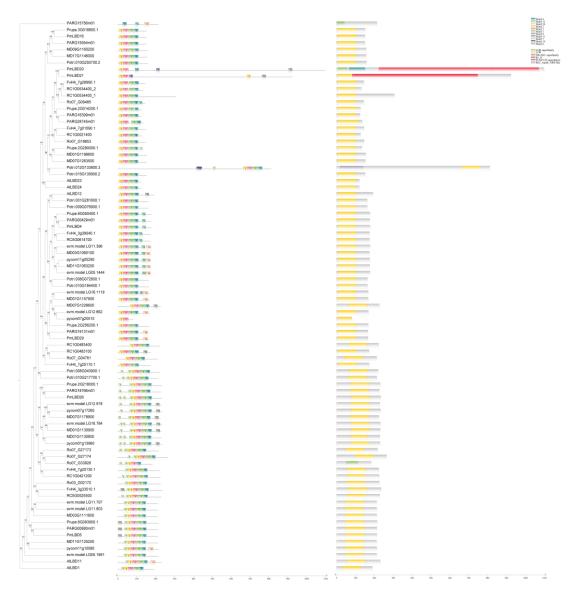
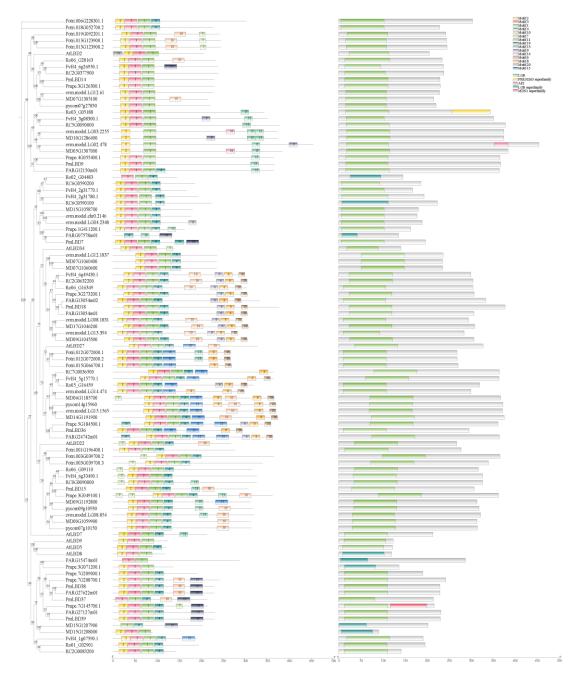


Figure S2. Phylogenetic evolutionary tree, motifs distributions, and domains of the subclass Ic

6 subfamily members.



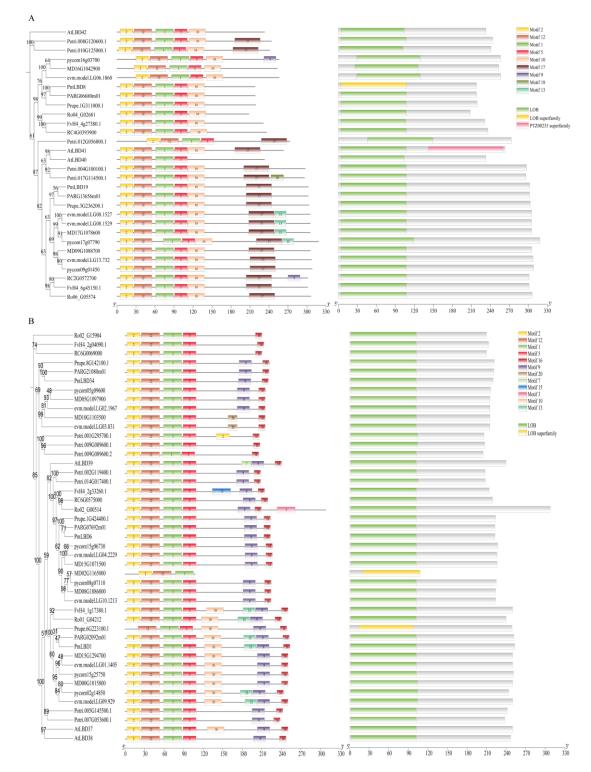
- Figure S3. Phylogenetic evolutionary tree, motifs distributions, and domains of the subclass Id
- 9 subfamily members.



10

11 Figure S4. Phylogenetic evolutionary tree, motifs distributions, and domains of the subclass Ie

12 subfamily members.

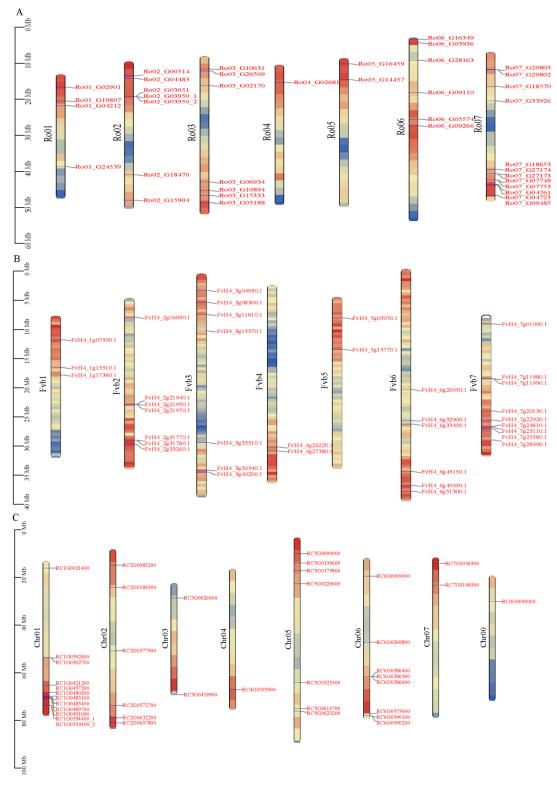


14 Figure S5. Phylogenetic evolutionary tree, motifs distributions, and domains of the subclass IIa

15 and IIb subfamily members. (A) Phylogenetic evolutionary tree, motifs distributions, and domains of

16 the subclass IIa subfamily members. (B) Phylogenetic evolutionary tree, motifs distributions, and

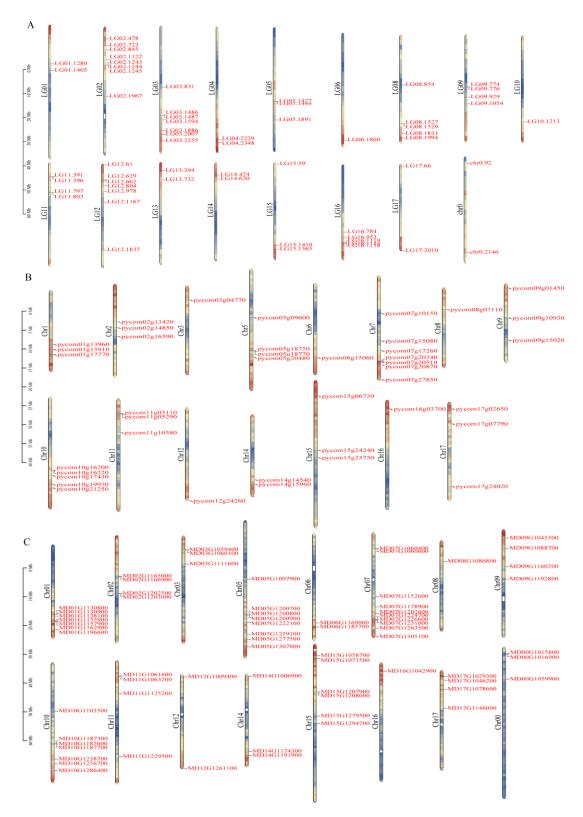
17 domains of the subclass IIb subfamily members.



19 Figure S6. Chromosome distribution of *LBDs* in the Rosoideae. (A) Chromosome distribution of

20 LBDs in R. occidentalis. (B) Chromosome distribution of LBDs in F. vesca. (C) Chromosome

²¹ distribution of *LBDs* in *R. chinensis*.

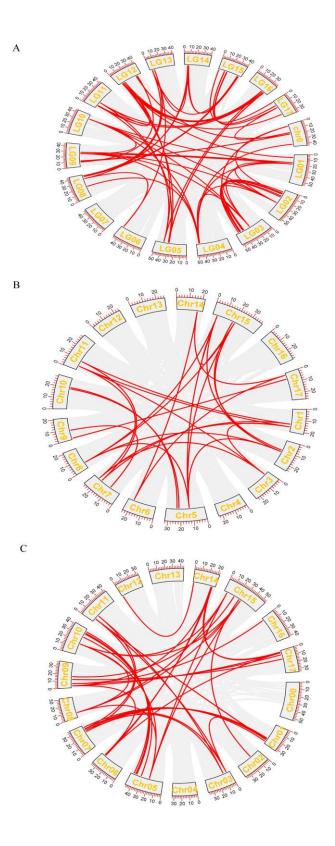


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23 Figure S7. Chromosome distribution of *LBDs* in the Maloideae. (A) Chromosome distribution of

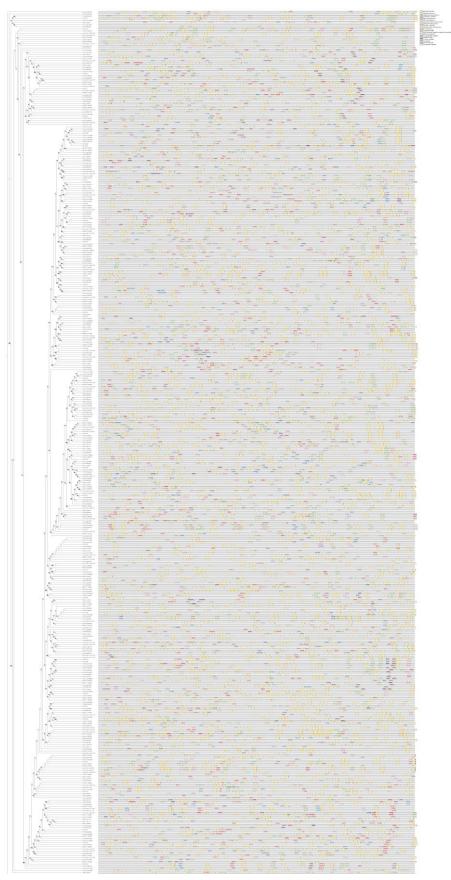
24 LBDs in C. pinnatifida. (B) Chromosome distribution of LBDs in P. communis. (C) Chromosome

25 distribution of *LBDs* in *M.domestica*.



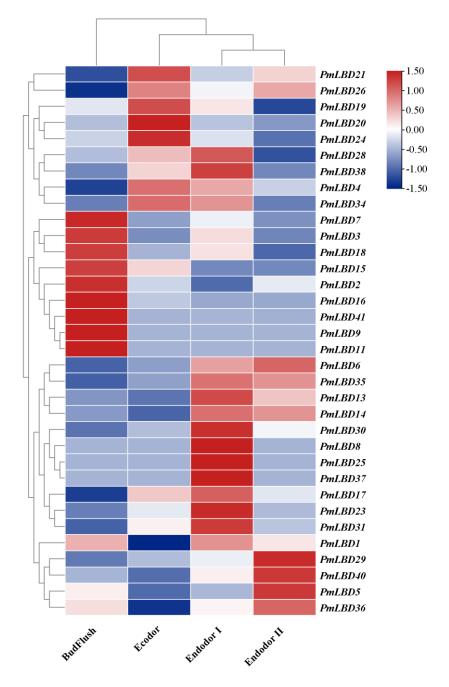
27 Figure S8. Collinearity of segmental duplication gene pairs of *LBDs* in the Maloideae. (A)

- 28 Collinearity of segmental duplication gene pairs of LBDs in C. pinnatifida. (B) Collinearity of
- 29 segmental duplication gene pairs of *LBDs in P. communis*. (C) Collinearity of segmental duplication
- 30 gene pairs of *LBDs* in *M.domestica*. The red lines represent the segment duplication (SD) gene pairs of
- 31 the LBDs.



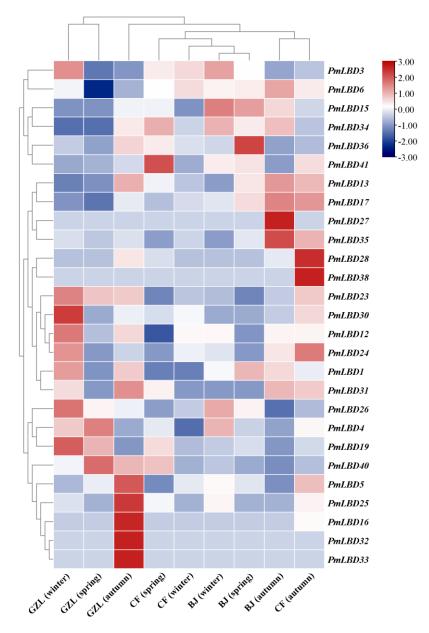


3 Figure S9. The distribution of the main 20 cis-elements in *LBD* gene promoters.





35 Figure S10. Expression pattern of *PmLBDs* in different developmental stages of flower buds.



37 Figure S11. Expression pattern of *PmLBDs* in different locations and seasons. BJ, Beijing; CF,

- 38 Chifeng; GZL, Gongzhuling.
- 39
- 40