## **Supplementary material**

**Fig. S1.** Mechanical separation of the flaxseed coats. (A) Picture of the flaxseed coats; (B) flaxseed coats separated into two parts **A** and **B**; (C) some mucilageneous cell (MC) material was isolated from seed coats as part **C**. Bars in A and B represent 1.0 mm, and the bar in C represents 0.5 mm.

**Fig. S2.** HPLC chromatograms of alkaline hydrolysis of separated samples. Chromatograms **A**, **B**, **C**, **B1**, and **B2** were obtained from mature seed samples. **SDG**: Chromatogram of secoisolariciresinol diglucoside (SDG). Chromatograms **I**, **II**, and **III** were obtained from 25 DAF seed samples. For details of sample preparation, see Figures 1 and 2. Framed peaks in different chromatograms represent SDG. Some peaks in chromatogram **B** were identified by comparing with standards as 4-(β-D-glucopyranosyl) coumarate (1), 4-(β-D-glucopyranosyl) ferulate (2), methyl 4-(β-D-glucopyranosyl) caffeate (3), methyl 4-(β-D-glucopyranosyl) coumarate (4), and methyl 4-(β-D-glucopyranosyl) ferulate (5).

Fig. S1.

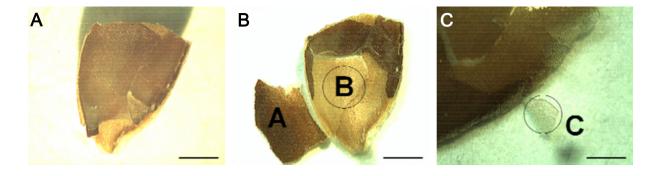


Fig. S2.

