



**Supplementary Fig. S6** SEM analysis of endosperm in WT<sup>HuangZao4</sup> and *ven2-1*. (a-b) Longitudinal dissection of WT<sup>HuangZao4</sup> and *ven2-1* mature seeds. Scale bars, 1 mm. (c-e) SEM images of WT<sup>HuangZao4</sup> mature endosperm in the areas c, d and e indicated in (a). Scale bars, 50 μm. (f-h) Magnified SEM images of WT<sup>HuangZao4</sup> endosperm of in c, d and e. Scale bars, 5 μm. (i-k) SEM images of *ven2-1* mature endosperm in the areas i, j, and k indicated in (b). Scale bars, 50 μm. (l-n) Magnified SEM images of *ven2-1* endosperm of in i, j, and k. Scale bars, 5 μm. HE, hard endosperm. SE, starchy endosperm. SG, starch granule. PB, protein body.