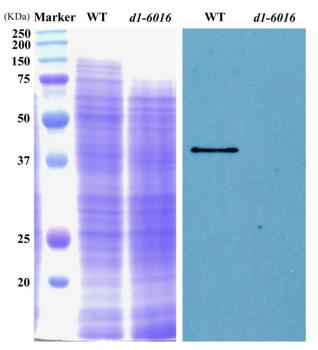
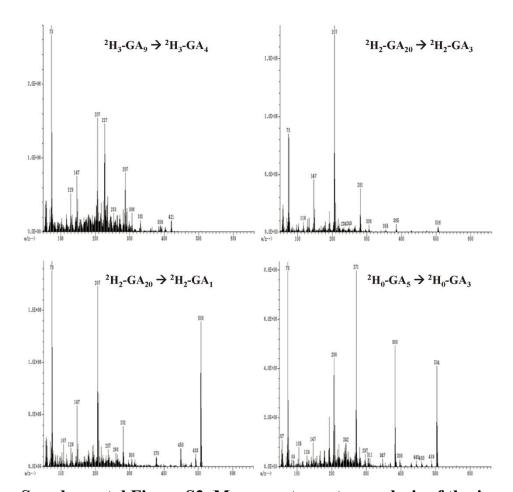


## Supplemental Figure S1. The GA biosynthetic pathway in plants. GGDP (geranylgeranyl diphosphate); ent-CDP (ent-copalyl diphosphate); CPS (ent-copalyl diphosphate synthase); KS (ent-kaurene synthase); KO (ent-kaurene oxidase); KAO (ent-kaurenoic acid oxidase); 13ox (GA 13-oxidase); 20ox (GA 20-oxidase); 3ox (GA 3-oxidase). The chemical group and bonds resulted for each enzyme function are highlighted in color. Cellular compartmentations are labeled. Bioactive GAs are $GA_1$ , $GA_4$ and $GA_3$ .



**Supplemental Figure S2. Specificity of the D1 antibody.** Western blot analysis with D1 antibody on total proteins from the *d1-6016* and wild type seedlings (right panel) and Coomassie Blue staining of the loading amount of the two samples (Left panel).



Supplemental Figure S3. Mass spectrometry analysis of the *in vitro* activity of recombinant GST-ZmGA3ox2 fusion protein. Purified GST-ZmGA3ox2 was incubated with  $[^2H_0]$ ,  $[^2H_2]$  and  $[^2H_3]$  GA substrates. The reaction product was analyzed by mass spectrometry.