

Supplemental Figure 7. Zymogram analysis of glycogen/starch synthase activities. Total proteins of crude exctracts of the wild type strain (WT), the 187G11 mutant strain and the recombinant protein GlgA2, were separated by native PAGE without glycogen. The native gels were then incubated with or without 3 mM ADP-glucose and 1.2 mM of maltoheptaose (DP7). 1.2 mM maltoheptaose was also added prior to migration. Glycogen/starch synthase activities are witnessed after iodine staining as a dark activity bands. The Wild type is able to initiate glycogen synthesis while the 187G11 mutant and the recombinant protein GlgA2 are enable do so. **1**: 187G11, **2**: WT, **3**: GlgA2.