Supplementary information

Structural basis for directional chitin biosynthesis

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SI Guide

Structural basis for directional chitin biosynthesis

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SI Figure 1 | Uncropped SDS-PAGE and western blot images from Extended Data Figures. a. SDS–PAGE analysis of purified *Ps*Chs1 in Extended Data Fig. 2a. b. Western blot analysis of *Ps*Chs1 truncation in Extended Data Fig. 2l. c. Western blot analysis of *Ps*Chs1 mutants in Extended Data Fig. 2j.

SI Video 1 | MD simulations of the apo *Ps*Chs1. The VLPGA loop adopts a closed conformation throughout the 50 ns simulation, which prevents the water from permeating freely through the channel.

SI Video 2 | MD simulations of the UDP/(GlcNAc)₃-bound *Ps*Chs1. UDP and (GlcNAc)₃ were removed from the complex structure before the simulation. The VLPGA loop adopts an open conformation throughout the 50 ns simulation, which allows the water to permeate freely through the channel.
SI Figure 1