



S1 Fig. Analytical ultracentrifugation (AUC) of *DaCHI*. Sedimentation velocity analysis of *DaCHI* was carried out with a XL-A analytical ultracentrifuge (Beckman Coulter, Brea, CA, USA). The protein was dissolved in a buffer of 20 mM Tris-HCl (pH 8.0), 150 mM NaCl. The sample and reference sectors of the dual-sector epon centerpiece were filled with the *DaCHI* protein solution and the buffer, respectively, and the cell was centrifuged (45,000 rpm). The sedimentation profile was monitored at 280 nm, and the experimental data were analyzed using the SEDFIT program [1,2]. *DaCHI* adopted a monomeric state in solution. AUC experiments using 0.5 mg/mL *DaCHI* (residues 1–231; calculated molecular weight of 23.9 kDa for the polypeptide chain) gives a mass of 23.4 kDa (sedimentation coefficient of 2.14 S and a frictional ratio of 1.316), indicating that *DaCHI* is a stable monomer in solution.

1. Schuck P. Size-distribution analysis of macromolecules by sedimentation velocity ultracentrifugation and lamm equation modeling. *Biophys J.* 2000; 78: 1606–1619.
2. Schuck P, Rossmanith P. Determination of the sedimentation coefficient distribution by least-squares boundary modeling. *Biopolymers.* 2000; 54: 328–341.