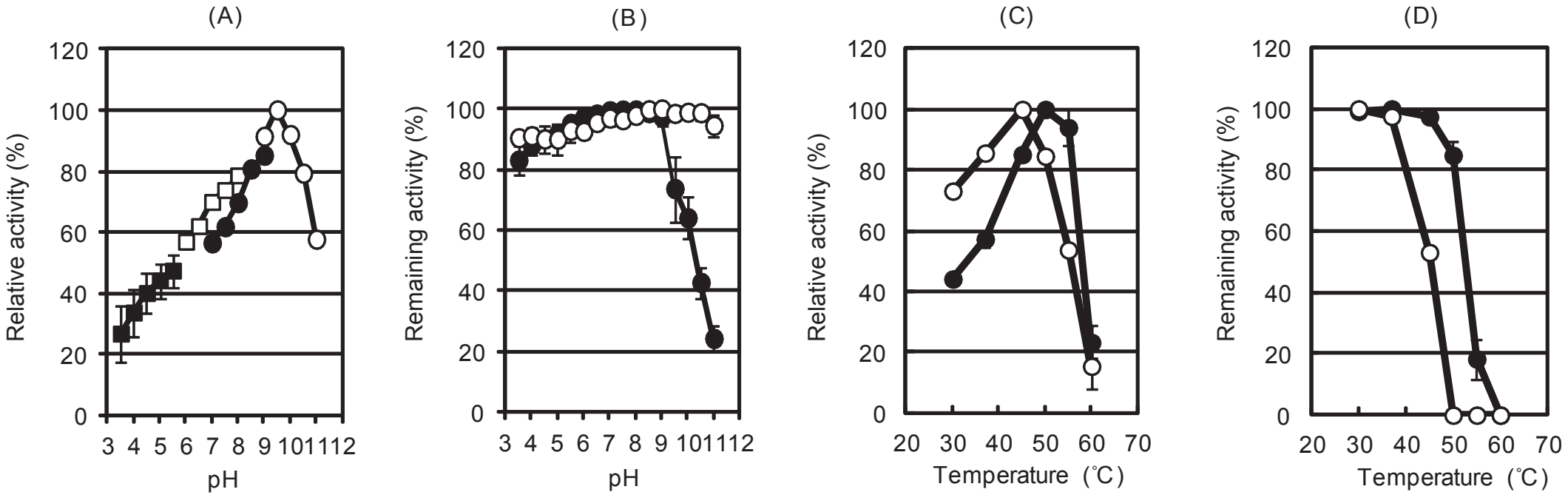

FIG. S3. Enzymatic properties of purified AsGahA

(A) Optimal pH: Glutaminase activity was measured in buffers (0.1 M) with various pH values. The buffers used were acetate buffer, pH 3.5–5.5 (■); phosphate buffer, pH 6.0–8.0 (□); Tris-HCl buffer, pH 7.0–9.0 (●); and carbonate bicarbonate buffer, pH 9.0–11.0 (○).

(B) pH stability: Glutaminase activity was measured after the incubation of purified AsGahA in buffers (20 mM) with various pH values for 16 h at 4°C (○) or 30°C (●), respectively. Assays were carried out in triplicate and the error bars indicate the SD.

(C) Optimal temperature: Glutaminase activity was determined in 0.1 M phosphate buffer, pH 7.0 (○) or 0.1 M carbonate bicarbonate buffer, pH 9.5 (●) at 30–60°C for 30 min.

(D) Thermal stability: Glutaminase activity was determined after the incubation of purified AsGahA in 0.1 M phosphate buffer, pH 7.0 (○) or 0.1 M carbonate bicarbonate buffer, pH 9.5 (●) at 30–60°C for 30 min. Assays were carried out in triplicate and the error bars indicate the SD.