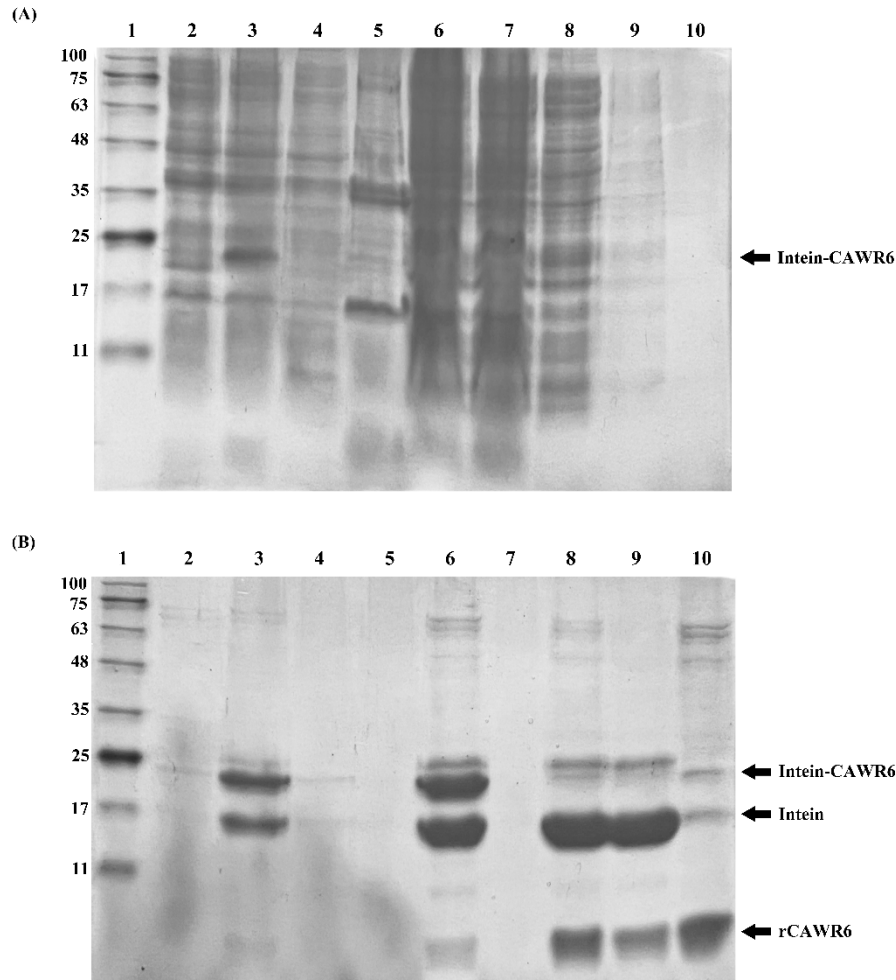
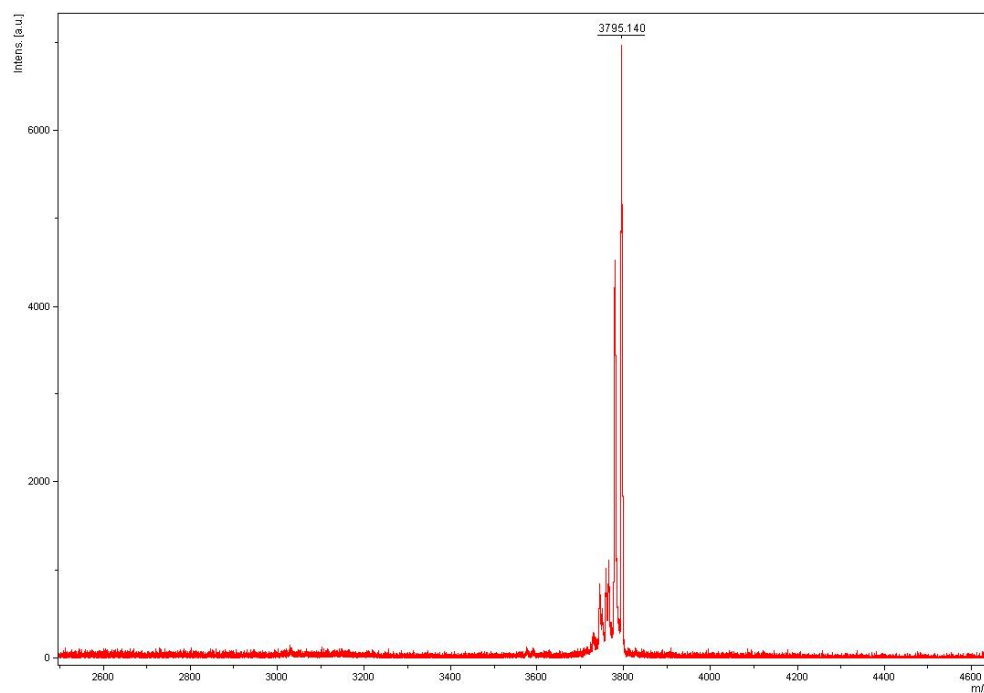


**Figure S1. Backbone assignment of KR12AGPWR6.** (A) 600 MHz TOCSY spectra assignments of KR12AGPWR6. (B) Overlapped spectra of TOCSY (yellow) and NOESY spectra (red) at NH-CαH region for KR12AGPWR6.



**Figure S2. SDS-PAGE analysis of recombinant His6-Intein-CA-AGP-WR6 expressed in *E. coli*.** (A) Lane 1: protein markers (kDa); lane 2: pre-culture cell lysate; lane 3: after IPTG induction at 16°C for 24 hours; lane 4: before IPTG induction; lane 5: cell lysate after IPTG induction at 16°C for 24 hours; lane 6: supernatant of cell lysate; lane 7: flow through; lane 8-10: washing by 40 mM imidazole. (B) Lane 1: protein markers (kDa); lane 2: washing by 80 mM imidazole; lane 3-5: elution by 400 mM imidazole; lane 6: eluted proteins after concentration using Amicon stirred cells with 3 kDa membranes; lane 7: flow through from lane 6; lane 8: mixtures of samples after intein self-cleavage in pH 10 buffer at 37°C for 24 hours; lane 9: supernatant of proteins after intein self-cleavage in pH 10 at 55°C for 24 hours; lane 10: pellet of proteins after intein self-cleavage in pH 10 at 55°C for 24 hours. Proteins were visualized with Coomassie blue staining.



**Figure S3. Mass analysis of CA-AGP-WR6 from RP-HPLC.** Molecular weight of CA-AGP-WR6 was found to be 3795.140 Da based on MALDI-TOF Mass. The theoretical MW of CA-AGP-WR6 was calculated to be 3794 Da.