**Figure S1: Glycan analysis of GA733-FcP (A) and GA733-FcKP (B)proteins by High Performance Liquid Chromatography (HPLC)**

N-glycan released from GA733-FcP (A) and GA733-FcKP (B) structure profiles were analyzed using HPLC. The glycan structures are displayed according to each peak in the graph. GlcNAc, the square; mannose, the white circle; α(1,3)-fucose, double diamond; β(1,2)-xylose, the white triangle.



**Figure S2: Surface plasmon resonance (SPR) analysis to confirm the binding affinity of GA733-FcP (a) and GA733-FcKP (b) to FcγRⅠ (CD64)**

Each curve shows concentrations of 1.5625, 3.125, 6.25, 12.5, 25, 50, and 100 nM of GA733-FcP (**A**), and GA733-FcKP (**B**). His-tag antibody and FcγRⅠ (CD64) were immobilized on the chip, and GA733-Fc and GA733-FcK were used as analytes. As the concentration of analytes (GA733-Fc and GA733-FcK) decreased, the graph changed constantly. GA733-FcM did not bind. The association and dissociation rates of GA733-FcK (**B**) were higher than those of GA733-Fc (**A**). Kinetic analysis of binding affinity of GA733-Fc and GA733-FcK purified from plants to recombinant human FcγRⅠ/CD64 was conducted using SPR analysis. The peak of GA733-FcK decreased less than that of GA733-Fc. These results show that the association rate constant, dissociation rate constant, and equilibrium dissociation rate (ratio of dissociation rate constant and association rate constant from kinetic experiments) of GA733-FcK were higher than those of GA733-Fc.

