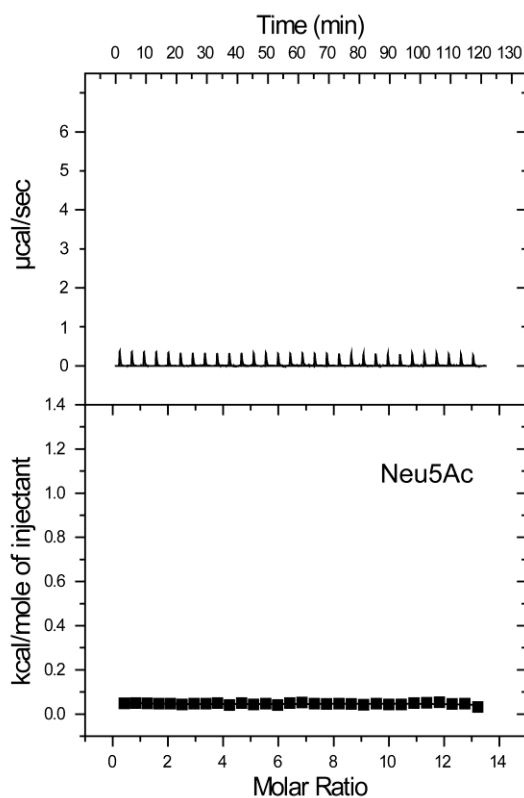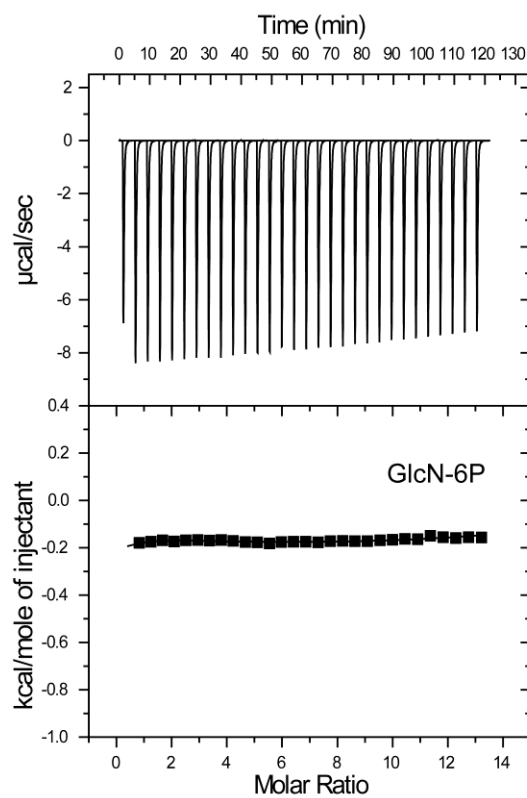**Supplementary Fig. S2. Neither Neu5Ac nor GlcN-6P bind to NanR.** Typical isothermal titration calorimetric measurements of the interactions between the NanR protein and other sugars such as Neu5Ac (A) and GlcN-6P (B). The raw data is displayed in the upper panel, and integration plot of the data is displayed in the lower panel. Each titration against the NanR protein is indicated in the panel. The heat data of sugar into the reaction buffer was subtracted from the reaction heat data between protein and sugar.