## **Supplemental Material**

## **Supplemental Figures**

**Figure S1.** Assessment of SliC and ACP activity against human lysozyme. (A) To determine if addition of SpyTag affects the SliC-mediated inhibition of c-type human, samples containing 2.5 μM human lysozyme (HL) were incubated with increasing concentrations of N-SliC (0-5 μM) for 30 min at 37°C. The controls contained HL alone. After incubation, the reaction was initiated by addition of DQ lysozyme substrate. The reaction was monitored for 20 min at excitation and emission wavelengths of 485 nm and 530 nm, respectively. (**B**, **C**, **D**) To examine if immunization with SliC/ACP elicit antigen function blocking antibodies, SliC/ACP were incubated with pooled sera from rabbits (**B** and **C**), or mice (**B** and **D**) immunized and control groups (1:10 v/v), as designated, for 30 min and the lysozyme assays were carried out as described above.

