



**Figure 7 – figure supplement 2:** A) Recombinant MbA\_GH25 was produced and purified using the *Pichia pastoris* protein expression system. The purified protein was loaded in a 12% SDS gel for visualization of an expected molecular weight of 27kDa for His-Tagged GH25. B) Schematic diagram of the recombinant construct, where the GH25 domain from *MBA* is tagged with an N-terminal polyhistidine Tag and a C-terminal peptide containing the c-myc epitope and a polyhistidine tag. C) Detection of lysozyme activity for Commercial Hen-egg white lysozyme (stock solution, 11 $\mu\text{M}$ ) using the EnzChek<sup>1</sup> Lysozyme Assay Kit. The fluorescence was recorded every minute in a fluorescence microplate reader using excitation/emission of 485/530 nm in increasing concentrations from 0.1 $\mu\text{M}$  to 5.5  $\mu\text{M}$ . Finally, Relative Fluorescence Unit (RFU)/ min was calculated for each concentration and plotted on the graph.