SUPPLEMENTAL FIGURES

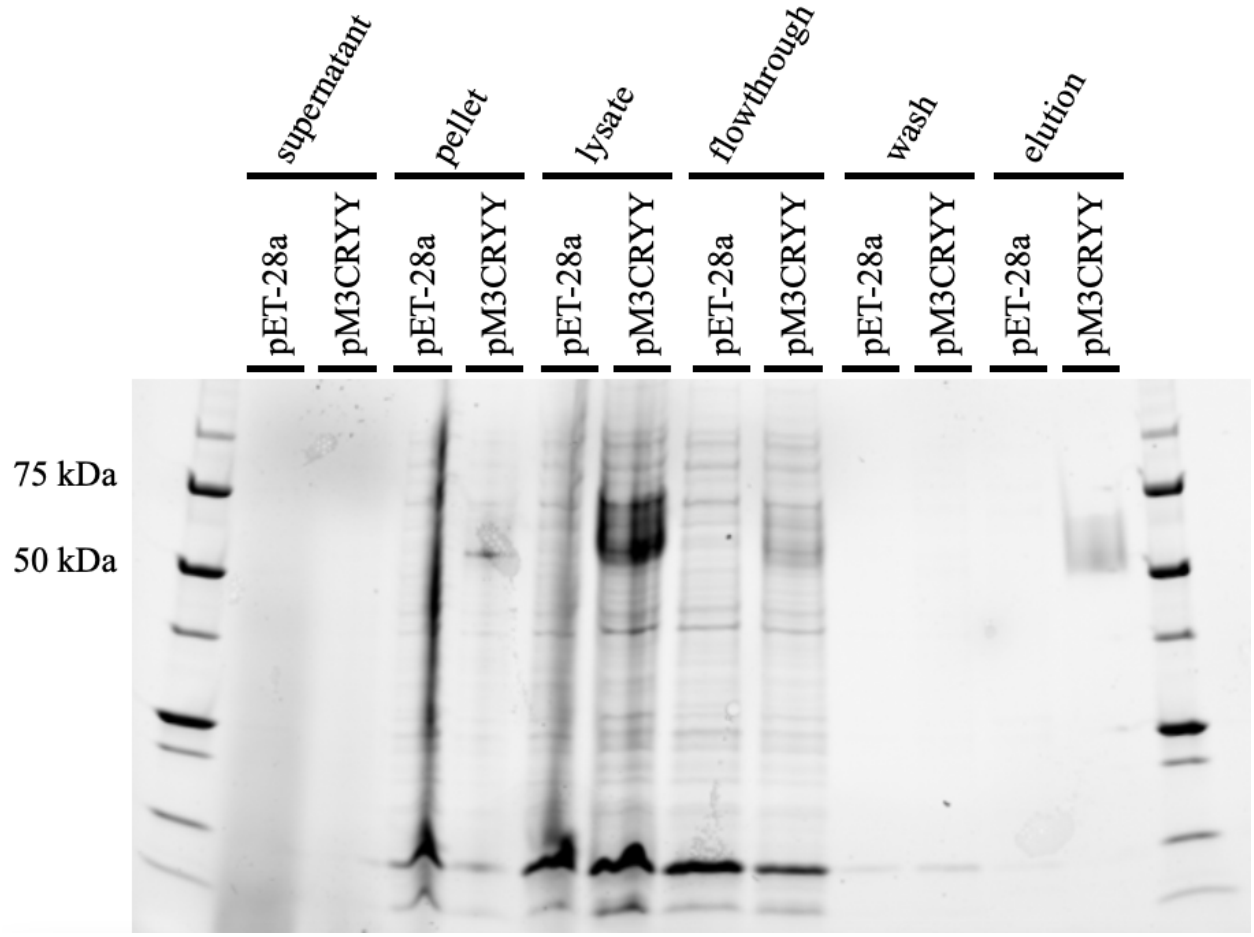

Figure S1. IPTG induction of *E. coli* pM3CRYY B4 BL21(DE3) results in the expression of a 55 kDa protein that can be purified using nickel affinity chromatography. pET-28a or pM3CRYY *E. coli* cultures were induced with 0.1 mM IPTG for 20 hours at 20ºC. 10 µL of supernatant, insoluble lysate, and soluble lysate fractions from the induced cultures were loaded onto a 4-20% gel. As well, the same volume of flowthrough, 10 mM wash, and 500 mM elution fractions from IMAC were loaded. Gels were run at 200 V for 40 minutes and imaged using the ChemiDoc™ Imaging System.

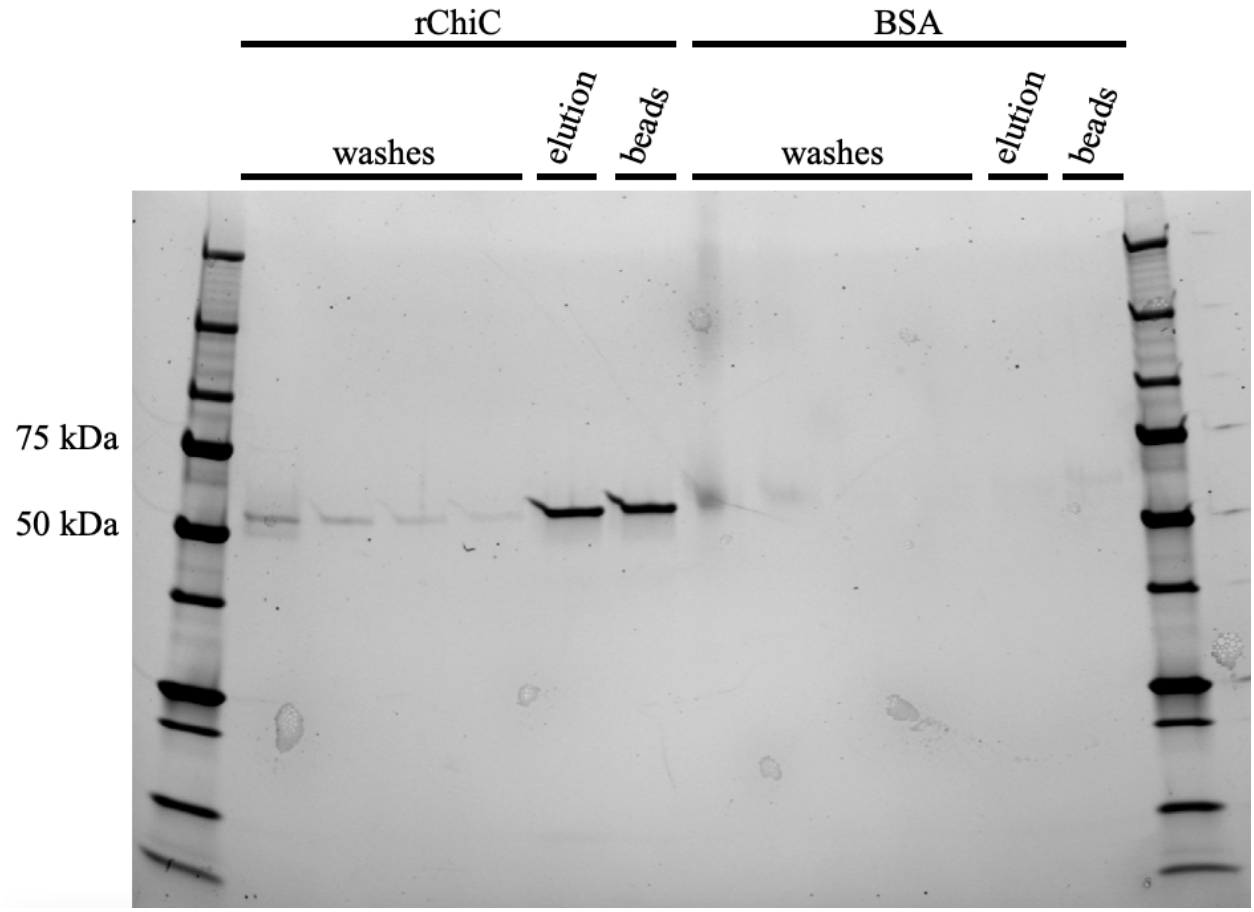

Figure S2. Purified recombinant ChiC displays chitin-binding activity. Purified, dialyzed rChiC or BSA were incubated with chitin resin beads at 20ºC for 30 minutes to assess chitin-binding activity. 4 successive washes were then performed before heating the beads to 95ºC to elute bound protein. 10 µL of each wash, elution, and resuspended bead fraction were loaded onto a 4-20% gel. Gels were run at 200 V for 40 minutes and imaged using the ChemiDoc™ Imaging System.

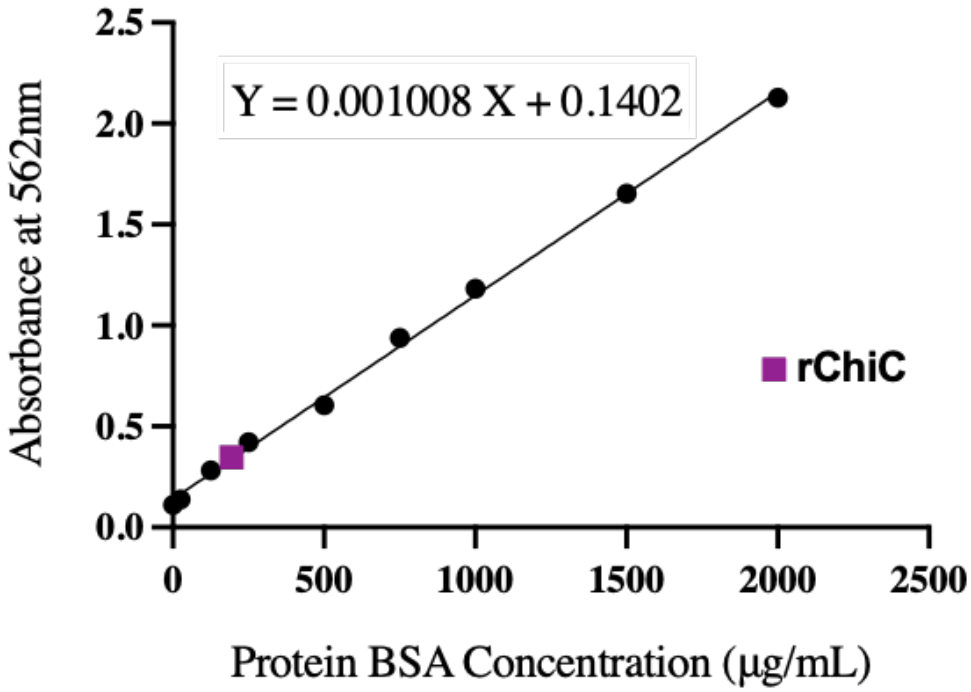

Figure S3. Concentration of rChiC was determined using a BCA assay. BSA standards were diluted with binding buffer to prepare concentrations between 0-2000 µg/ml. rChic was diluted with the binding buffer to make 1:10, 1:100, and 1:1000 dilutions and an undiluted sample. 25 µl of each BSA standard or sample was loaded in wells with 200 µl BCA Working Reagent, prepared from BCA Reagents A and B (50:1). Absorbance was measured at 562 nm. The equation of the standard curve is Y= 0.001008X + 0.1402, and the concentration of rChiC was determined to be 210.8 µg/ml.