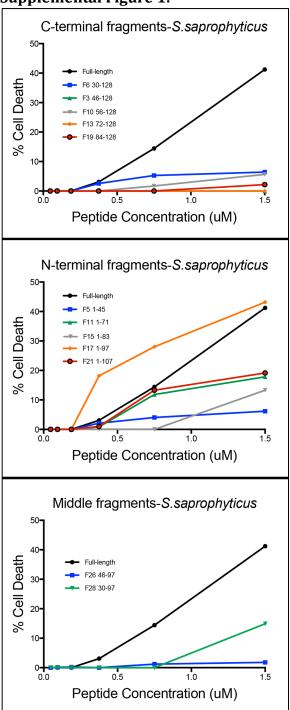
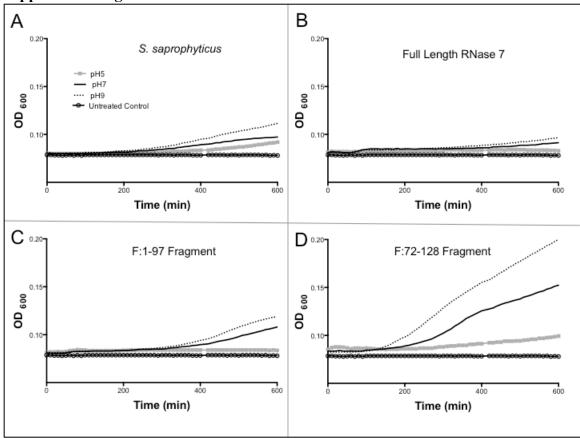
## **Supplemental Figure 1:**



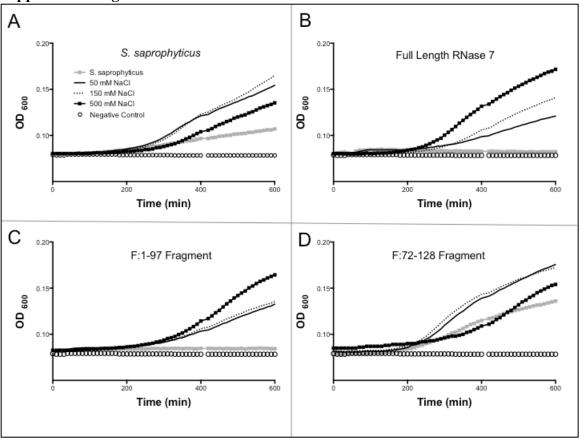
**Supplemental Figure 1:** Bacterial cell death assay results for C-terminal (top panel), N-terminal (middle panel) and middle (bottom panel) fragments for *S. saprophyticus*. **Top Panel**: C-terminal fragments result in reduced membrane permeabilization and death for *S. saprophyticus* compared to full-length protein. **Middle Panel**: The N-terminal fragment F:1-97 has improved activity compared to full-length. **Bottom Panel**: Unlike its enhanced activity against *E. coli* (Figure 2), the middle fragment F:46-97 demonstrates no activity compared to full length protein.

# **Supplemental Figure 2:**



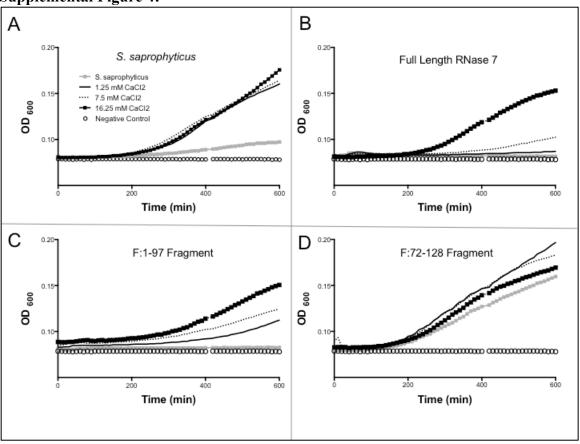
**Supplemental Figure 2:** *S. saprophyticus* growth curves after treatment with different recombinant peptides at various pH levels. **A**: *S. saprophyticus* growth is optimum at pH 9 (dashed line) compared to pH 5 and 7. **B**: Full-length RNase 7 activity is potent at all pH's. **C**: F:1-97 has optimal activity at pH 5 (gray squares). **D**: F:72-128 has minimal activity with enhanced growth at pH 7 and 9.

## **Supplemental Figure 3:**



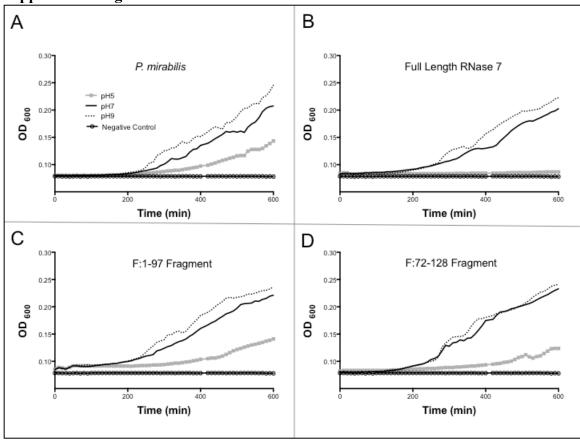
**Supplemental Figure 3:** *S. saprophyticus* growth curves after treatment with different recombinant peptides at various NaCl titers and with no added NaCl (gray squares). **A**: *S. saprophyticus* has improved growth with 50 mM NaCl and 150 mM NaCl. Growth is blunted compared to the other NaCl concentrations at NaCl 500 mM (black boxes) but still better than no added salt (gray boxes). **B**: Full length RNase 7 activity inversely related to NaCl concentration. At 500 mM, activity is markedly diminished. **C**: F:1-97 has activity pattern comparable to full-length peptide at various NaCl concentrations. **D**: F:72-128 has minimal activity against *S. saprophyticus* at all NaCl concentrations and does not differ from bacterial growth with no recombinant peptide added (Panel A).

## **Supplemental Figure 4:**



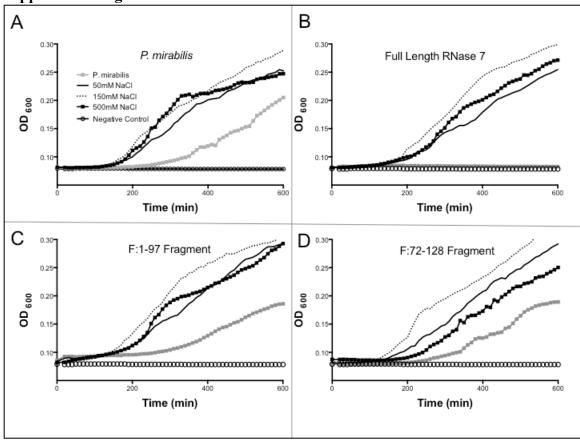
**Supplemental Figure 4:** *S. saprophyticus* growth curves after treatment with different recombinant peptides at various CaCl<sub>2</sub> titers and with no added CaCl<sub>2</sub> (gray squares). **A**: *S. saprophyticus* has markedly increased growth with all concentrations of additional CaCl<sub>2</sub>. **B**: Full length RNase 7 activity is inversely related to CaCl<sub>2</sub> concentration. Activity significantly diminished at highest CaCl<sub>2</sub> concentration. **C**: F:1-97 activity is inversely related to CaCl<sub>2</sub> concentration but more pronounced compared to full length RNase 7. **D**: F:72-128 has similar minimal activity against *E. coli* at all CaCl<sub>2</sub>.

## **Supplemental Figure 5:**



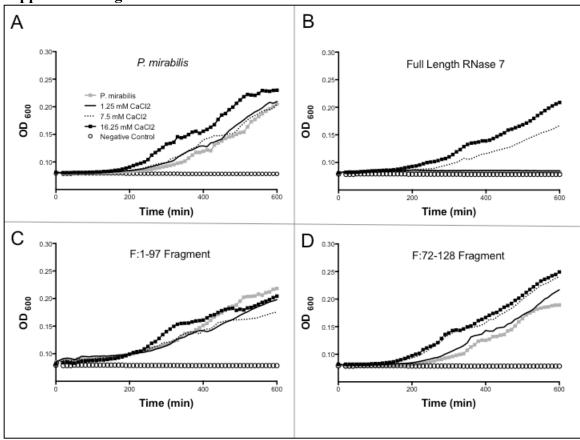
**Supplemental Figure 5:** *Proteus mirabilis* growth curves after treatment with different recombinant peptides at various pH levels. **A**: *P. mirabilis* growth is least at pH 5 (gray squares) and increases as pH increases. **B**: Full length RNase 7 activity is potent at pH 5. At pH 7 and 9, full length activity is significantly reduced. **C**: F:1-97 has optimal activity at pH 5 (gray squares), but less compared to full length (Panel B). **D**: F:72-128 has minimal activity with enhanced growth at pH 7 and 9.

## **Supplemental Figure 6:**



**Supplemental Figure 6:** *Proteus mirabilis* growth curves after treatment with different recombinant peptides at various NaCl titers and with no added NaCl (gray squares). **A**: *P. mirabilis* has improved growth at all NaCl concentrations compared to no added salt (gray boxes). **B**: Full length RNase 7 activity markedly diminished at all salt concentrations. **C**: F:1-97 has activity pattern comparable to full-length peptide at various NaCl concentrations. Interestingly, F:1-97 has less activity than full length RNase 7 (Panel B). Activity overall is similar to control conditions with no recombinant peptide added (top left). **D**: F:72-128 has minimal activity against *P. mirabilis* at all NaCl concentrations and does not differ from bacterial growth with no recombinant peptide added (Panel A).

## **Supplemental Figure 7:**



**Supplemental Figure 7:** *Proteus mirabilis* growth curves after treatment with different recombinant peptides at various CaCl<sub>2</sub> titers and with no added CaCl<sub>2</sub> (gray squares). **A**: CaCl<sub>2</sub> concentration has little effect on *P. mirabilis* growth except at highest concentration. At 16.25 mM (black squares), *P. mirabilis* has slightly enhanced growth compared to other conditions. **B**: Full length RNase 7 activity is significantly diminished at higher CaCl<sub>2</sub> concentrations but relatively unaffected at 1.25 mM concentration (black line). **C**: F:1-97 activity is not significantly altered by CaCl<sub>2</sub> concentrations. Further, F:1-97 has minimal activity against *P. mirabilis*. **D**: F:72-128 has similar minimal activity against *P. mirabilis* at all CaCl<sub>2</sub>.