Supplementary Material

## Supplementary Figures

**Supplementary Figure 1.** Proteins extracted from *Antipathes* (A) and *Stichopathes* (S) skeleton after the skeleton was cleaned pre-grinding only (1X) or both pre- and post-grinding (2X). Extraction methods used used either hydrochloric acid (HCl), guanidine hydrochloride GHCl) (both shown on gel A), dithiothriotol (DTT), or Chitinase (both shown on gel B). Contrast was increased on both gel images to test for very faint protein bands in GHCl and DTT extractions.

## Supplementary Tables

**Supplementary Table 1.** Protein quantification of the various cleaning fractions of *Antipathes griggi* and *Stichopathes* sp. skeleton by BCA.

**Supplementary Table 2.** Proteomic sequencing data and protein characterization of the various cleaning fractions of *Antipathes griggi* and *Stichopathes* sp. skeleton.

**Supplementary Table 3.** Reciprocal best BLAST hits from the various cleaning fractions between *Antipathes griggi* and *Stichopathes* sp. skeletal proteins.

**Supplementary Table 4.** Results of Fisher’s exact test of fractions in which reciprocal best BLAST hits were found between *Antipathes griggi* and *Stichopathes* sp. skeletal proteins.

## Additional Files

**Additional File S1.** Sequences of all proteins detected from *Antipathes griggi* separated by whether they were found only in fractions cleaned twice, only in fractions cleaned once, or in both fractions.

**Additional File S2.** Sequences of all proteins detected from *Stichopathes* separated by whether they were found only in fractions cleaned twice, only in fractions cleaned once, or in both fractions.