Supporting Information

Discovery of Protein-Based Natural Hydrogel from the Girdle of the ‘Sea Cockroach’ (*Chiton articulatus*; Chitonidae)

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**Table S1.** Peaks recorded during FTIR analysis in this study for *C. articulatus* hydrogel and their chemical assignment, compared with peaks observed in three other studies of natural hydrogels.

| **Functional groups and vibration modes** | **Classification** | **Wavenumber (cm−1) frequency** |
| --- | --- | --- |
| **Hydrogel from** ***C. articulatus*** | **Collagen****[93]** | **Keratin****[94]** | **Fibroin****[95]** |
| N-H stretching |  | 3275 | - | - | 3280 |
| CH3 sym. stretch and CH2asym. stretch | Aliphatic compounds | 2921 | - | - | 2930 |
| C=O secondary amide stretch  | Amide I | 1625 | 1628 | 1628 | 1630 |
| N–H bend, C–N stretch  | Amide II | 1537 | 1540 | 1531 | 1520 |
| CH2 bending and CH3 deformation  | - | 1457 | 1449 | - | 1439 |
| CH bend, CH3 sym. deformation | - | 1404 | 1397 | - | - |
| CH2 wagging | Amide III, components of protein  | 1235 | 1234 | 1247 | 1230 |