

Table S1. Comparison of the identities of BCO2 homologs between *P. yessoensis* and other organisms.

| Species | Full Protein (%) |
|--------------------------------|-------------------------|
| <i>Patinopecten yessoensis</i> | 100 |
| <i>Homo sapiens</i> | 39.49 |
| <i>Mus musculus</i> | 39.73 |
| <i>Gallus gallus</i> | 38.48 |
| <i>Xenopus tropicalis</i> | 39.58 |
| <i>Danio rerio</i> | 40.65 |
| <i>Argopecten irradians</i> | 73.64 |
| <i>Pecten maximus</i> | 78.58 |
| <i>Scapharca broughtonii</i> | 50.65 |
| <i>Caenorhabditis elegans</i> | 31.62 |