**Table S1**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Marker | Primer | Sequence 5’-3’ | Lenght | PCR cycle | Reference |
| COI | PolyLCO | (F) GAYTATWTTCAACAAATCATAAAGATATTGG | 658 bp | 1)94 °C (1 min); 2) 5 cycles: 94 °C (40 s), 45 °C (40s), 72 °C (1 min); 3) 35 cycles: 94 °C (40 s), 51 °C (40 s), 72 °C (1 min); 4)72 °C (5 min). | Carr et al., 2011 |
| PolyHCO | (R) TAMACTTCWGGGTGACCAAARAATCA |
| 16S | 16SAr\_F | (F) CGCCTGTTTATCAAAAACAT | 440 bp | 1)94°C (2 min); 2)35 cycles: 94°C (30 s), 52°C (40 s), 72 ° C (1 min); 3)72°C (10 min). | Palumbi, 1996 |
| 16SBr\_R | (R) CCGGTCTGAACTCAGATCACGT |
| 28S | 28SC1 | (F) ACCCGCTGAATTTAAGCAT  | 809 bp | 1)96°C (4 min); 2) 45 cycles: 94°C (30 s), 48°C (30 s), 72°C (1 min); 3) 72 °C (8 min). | Hassouna et al., 1984 |
| 29SD2 | (R) TCCGTGTTTCAAGACGG |

**References for Table S1**

Carr, C.M., Hardy, S.M., Brown, T.M., Macdonald, T.A., Hebert, P.D. (2011). A tri-oceanic perspective: DNA barcoding reveals geographic structure and cryptic diversity in Canadian polychaetes. *PLoS One*, 6, e22232. [https://doi.org/10.1371/ journal. pone.0022232](https://doi.org/10.1371/%20journal.%20pone.0022232)

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