Table 1S: List of sequences for ITS, LSU and COI genes available in GenBank and used in the present study, showing name of *Uncinaria* species, host name, country and locality where parasites were collected.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Species** | **Host** | **Country** | **Locality** | **ID** | **ITS** | **LSU** | **COI** |
| *Uncinaria* sp. this study | *Arctocephalus australis* | Chile | Guafo Island | 1U | KX276196 | KX276202 | KY465459 |
| *Uncinaria* sp. this study | *Arctocephalus australis* | Chile | Guafo Island | 2U | KX276197 | KX276203 | KY465460 |
| *Uncinaria* sp. this study | *Arctocephalus australis* | Chile | Guafo Island | 3U | KX276198 | KX276204 | KY465464 |
| *Uncinaria* sp. this study | *Arctocephalus australis* | Chile | Guafo Island | 4U | KX276199 | KX276205 | KY465465 |
| *Uncinaria* sp. this study | *Arctocephalus australis* | Chile | Guafo Island | 7U | KX276200  | KX276206 | KY465466 |
| *Uncinaria* sp. this study | *Otaria flavescens* | Chile | Antofagasta | 3UA | KY465455 | KY465456 | KY465463 |
| *Uncinaria* sp. this study | *Arctocephalus australis* | Perú | Ica | Un1 | KY465446 |   | KY465468 |
| *Uncinaria* sp. this study | *Arctocephalus australis* | Perú | Ica | Un2 | KY465447 |   | KY465469 |
| *Uncinaria* sp. this study | *Arctocephalus australis* | Perú | Ica | Un3 | KY465448 |   |   |
| *Uncinaria* sp. this study | *Arctocephalus australis* | Perú | Ica | Un4 | KY465449 |   |   |
| *Uncinaria* sp. this study | *Arctocephalus australis* | Perú | Ica | Un5 | KY465450 |   | KY465470 |
| *Uncinaria* sp. this study | *Arctocephalus australis* | Perú | Ica | Un6 | KY465451 |   | KY465471 |
| *Uncinaria* sp. this study | *Arctocephalus australis* | Perú | Ica | Un7 | KY465452 |   | KY465472 |
| *Uncinaria* sp. this study | *Arctocephalus australis* | Perú | Ica | K2 | KY465444 |   | KY465461 |
| *Uncinaria* sp. this study | *Arctocephalus australis* | Perú | Ica | K3 | KY465445 |   | KY465462 |
| *Uncinaria* sp. this study | *Arctocephalus australis* | Perú | Ica | K4 | KY465453 | KY465457 | KY465467 |
| *Uncinaria* sp. this study | *Arctocephalus australis* | Perú | Ica | K5 | KY465454 | KY465458 |   |
| *Uncinaria* sp. | *Arctocephalus pusillus*  | Australia | Victoria | X5313 | HQ262045 | HQ261928 |   |
| *Uncinaria* sp. | *Arctocephalus pusillus*  | Australia | Victoria | X5316 | HQ262051 | HQ261920 |   |
| *U. sanguinis* | *Neophoca cinerea* | Australia | Kangaroo Island | SBH04-03 | KF690664 |   | KF693747 |
| *U. sanguinis* | *Neophoca cinerea* | Australia | Spencer Gulf | DRH04-01 | KF690654 |   | KF693725 |
| *U. sanguinis* | *Neophoca cinerea* | Australia | Kangaroo Island | SBH07-01 | KF690668 |   | KF693741 |
| *U. sanguinis* | *Neophoca cinerea* | Australia | Kangaroo Island | SBH08-01 | KF690669 |   | KF693719 |
| *U. sanguinis* | *Neophoca cinerea* | Australia | Kangaroo Island | SBH09-01 | KF690670 |   | KF693707 |
| *U. sanguinis* | *Neophoca cinerea* | Australia | Kangaroo Island | SBH01-01 |   |   | KF693705 |
| *U. sanguinis* | *Neophoca cinerea* | Australia | Kangaroo Island | SBH22-01 |   |   | KF693711 |
| *U. sanguinis* | *Neophoca cinerea* | Australia | Kangaroo Island | SBH20-06 |   |   | KF693723 |
| *U. sanguinis* | *Neophoca cinerea* | Australia | South Page Island | PSH01-01 |   |   | KF693732 |
| *U. sanguinis* | *Neophoca cinerea* | Australia | Kangaroo Island | SBH29-01 |   |   | KF693735 |
| *U. sanguinis* | *Neophoca cinerea* | Australia | Spencer Gulf | DRH22-01 |   |   | KF693753 |
| *U. sanguinis* | *Neophoca cinerea* | Australia | Spencer Gulf | DRH12-01 |   |   | KF693756 |
| *U. sanguinis* | *Neophoca cinerea* | Australia | Kangaroo Island | SBH18-01 |   |   | KF924756 |
| *U. sanguinis* g2 | *Neophoca cinerea* | Australia | Kangaroo Island | SBH20-01 |   |   | KF693760 |
| *U. sanguinis* g2 | *Neophoca cinerea* | Australia | Kangaroo Island | SBH19-01 | KJ396039 |   | KF924757 |
| *Uncinaria* cf. *hamiltoni* | *Arctocephalus pusillus*  | Australia | Victoria | KAN4 | HE962177 |   |   |
| *Uncinaria* cf. *hamiltoni* | *Arctocephalus pusillus*  | Australia | Victoria | KAN5 | HE962178 |   |   |
| *U. hamiltoni,* this study | *Otaria flavescens* | Chile | Iquique | 10 |   | KX276208 |   |
| *U. hamiltoni,* this study | *Arctocephalus australis* | Uruguay |   | AAUY | KX276201 | KX276207 |   |
| *U. hamiltoni* | *Otaria flavescens* | Argentina | Punta Leon | X3537 | HQ262111 | HQ261850 |   |
| *U. hamiltoni* | *Otaria flavescens* | Argentina | Punta Leon | X3539 | HQ262112 | HQ261851 |   |
| *U. hamiltoni* | *Otaria flavescens* | Argentina | Punta Leon | X3558 | HQ262113 | HQ261853 |   |
| *U. hamiltoni* | *Arctocephalus australis* | Uruguay | Rocha | X3620 | HQ262110 | HQ261870 |   |
| *U. hamiltoni* | *Arctocephalus australis* | Uruguay | Rocha | X3729 | HQ262101 | HQ261864 |   |
| *U. hamiltoni* | *Otaria flavescens* | Uruguay | Rocha | X3988 | HQ262120 | HQ261855 |   |
| *U. hamiltoni* | *Arctocephalus australis* | Uruguay | Maldonado | X3989 | HQ262102 | HQ261860 |   |
| *U. hamiltoni* | *Arctocephalus australis* | Uruguay | Maldonado | X4066 | HQ262105 | HQ261865 |   |
| *U. hamiltoni* | *Arctocephalus australis* | Uruguay | Maldonado | X4067 | HQ262106 | HQ261866 |   |
| *U. hamiltoni* | *Arctocephalus australis* | Uruguay | Maldonado | X4069 | HQ262108 | HQ261868 |   |
| *Uncinaria* sp. | *Phocarctos hookeri* | Nueva Zelanda | Enderby Island | X3877 | HQ262089 | HQ261872 |   |
| *Uncinaria* sp. | *Phocarctos hookeri* | Nueva Zelanda | Enderby Island | X3892 | HQ262093 | HQ261880 |   |
| *Uncinaria* sp. | *Phocarctos hookeri* | Nueva Zelanda | Enderby Island | X4078 | HQ262098 | HQ261878 |   |
| *Uncinaria* sp. | *Mirounga leonina* | Tasmania | Macquarie Island | X5309 | HQ262123 | HQ261849 |   |
| *Uncinaria* sp. | *Mirounga leonina* | Tasmania | Macquarie Island | X5312 | HQ262126 | HQ261847 |   |
| *Uncinaria* sp. | *Mirounga leonina* | Tasmania | Macquarie Island | X5324 | HQ262127 | HQ261844 |   |
| *Uncinaria* sp. | *Mirounga leonina* | Tasmania | Macquarie Island | X5327 | HQ262130 | HQ261841 |   |
| *Uncinaria* sp. | *Monachus monachus* | Greece | Orei | X5551 | HQ262065 | HQ261905 |   |
| *Uncinaria* sp. | *Monachus monachus* | Greece | Orei | X5552 | HQ262066 | HQ261906 |   |
| *U. lucasi* | *Callorhinus ursinus* | Rusia |   | X2988 | HQ262071 | HQ261883 |   |
| *U. lucasi* | *Eumetopias jubatus* | USA | Alaska | X4081 | HQ262143 | HQ261826 |   |
| *U. lucasi* | *Eumetopias jubatus* | USA | Alaska | X4083 | HQ262144 | HQ261827 |   |
| *U. lucasi* | *Eumetopias jubatus* | Rusia |   | X4267 | HQ262148 | HQ261831 |   |
| *U. lyonsi* | *Zalophus californianus* | USA | San Miguel Island, California | X4117 | HQ262058 | HQ261909 |   |
| *U. lyonsi* | *Zalophus californianus* | USA | San Miguel Island, California | X4118 | HQ262057 | HQ261908 |   |
| *U. lyonsi* | *Zalophus californianus* | USA | San Miguel Island, California | X2741 | HQ262063 | HQ261915 |   |
| *U. lyonsi* | *Zalophus californianus* | USA | San Miguel Island, California | X2742 | HQ262062 | HQ261914 |   |
| *U. yukonensis* | *Ursus arctos horribilis*  | Canadá | Banff National Park | UofC X11 | KJ026496 |   |   |
| *U. yukonensis* | *Ursus arctos horribilis*  | Canadá | Banff National Park | UCD X7341 | KJ026495 |   |   |
| *U. rauschi* | *Ursus americanus*  | Canadá | Fort Nelson, BC | UofC X20 | KJ026501 |   |   |
| *U. rauschi* | *Ursus arctos horribilis*  | Canadá | Kitwancool Lake, BC | UofC X50 | KJ026504 |   |   |
| *U. rauschi* | *Ursus arctos horribilis*  | Canadá | Banff National Park | UofC X35 | KJ026505 |   |   |
| *U. stenocephala* | *Urocyon littoralis* | USA | San Miguel Island, California | X3066 | HQ262052 | HQ261919 |   |
| *U. stenocephala* | *Urocyon littoralis* | USA | San Miguel Island, California | X3067 | HQ262053 | HQ261918 |   |
| *U. stenocephala* | *Urocyon littoralis* | USA | San Miguel Island, California | X3068 | HQ262054 | HQ261917 |   |
| *U. stenocephala* | *Canis lupus familiaris* | Australia | Victoria | US1 |   |   | AJ407939 |
| *Ancylostoma caninum* | *Canis familiaris* |   |   |   |   | AM039739 |   |
| *Ancylostoma caninum* | *Canis lupus familiaris* | USA |   | 1805AC | JQ812694 |   |   |