**Table S1.** Genome size estimate and source of sample for each individual specimen

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Species ID** | **Species** | **Common Name** | **Sex** | **Age** | **Specimen** | **1c Genome Size (pg)** | **Location** | **Captive/Stranded** |
| Hubbs-1209-Mn | *Megaptera novaeangliae* | Humpback whale | F | juvenile | Spleen | 3.71 | Atlantic | Stranded |
| SW031065 | *Cephalorhynchus commersonii* | Commerson's dolphin | F | adult | Spleen | 3.24 |  | Managed care |
| SW070493 | *Cephalorhynchus commerconii* | Commerson's dolphin | M | calf | Spleen | 3.16 |  | Managed care |
| SW100075 | *Delphinus delphis* | Common dolphin | M | juvenile | Spleen | 3.35 | Pacific | Stranded |
| SW110953 | *Delphinus delphis* | Common dolphin | M | calf | Spleen | 3.42 | Pacific | Stranded |
| SW070794 | *Delphinus delphis* | Common dolphin | M | adult | Spleen | 3.73 |  | Managed care |
| SW110122 | *Delphinus delphis* | Common dolphin | M | juvenile | Spleen | 3.69 | Pacific | Stranded |
| SW140476 | *Delphinus delphis* | Common dolphin | M | yearling | Spleen | 3.61 | Pacific | Stranded |
| SW120472 | *Globicephala macrorhynchus* | Short-finned pilot whale | M | adult | Spleen | 3.37 |  | Managed care |
| Hubbs-1036-Gm | *Globicephala macrorhynchus* | Short-finned pilot whale | F | adult | Spleen | 3.75 | Atlantic | Stranded |
| SW131056 | *Grampus griseus* | Risso's dolphin | F | adult | Spleen | 3.59 | Pacific | Stranded |
| SWC150590 | *Grampus griseus* | Risso's dolphin | M | calf | Spleen | 4.03 | Pacific | Stranded |
| Hubbs-1222-Gg | *Grampus griseus* | Risso's dolphin | F | adult | Spleen | 3.37 | Atlantic | Stranded |
| Hubbs-1266-Gg | *Grampus griseus* | Risso's dolphin | F | adult | Spleen | 3.41 | Atlantic | Stranded |
| SW060970 | *Lagenorhynchus obliquidens* | Pacific white-sided dolphin | F | calf | Spleen | 3.82 |  | Managed care |
| SW070571 | *Lagenorhynchus obliquidens* | Pacific white-sided dolphin | M | adult | Spleen | 3.58 |  | Managed care |
| SW060524 | *Lissodelphis borealis* | Northern right whale dolphin | M | calf | Spleen | 3.74 | Pacific | Stranded |
| SW070782 | *Orcinus orca* | Killer whale | M | adult | Spleen | 4.22 |  | Managed care |
| SW080429 | *Orcinus orca* | Killer whale | F | juvenile | Spleen | 4.07 |  | Managed care |
| SW100830 | *Orcinus orca* | Killer whale | F | adult | Spleen | 4.09 |  | Managed care |
| Hubbs-1304-Pc | *Pseudorca crassidens* | False killer whale | F | adult | Spleen | 3.56 | Atlantic | Stranded |
| Hubbs-1315-Tt | *Tursiops truncatus* | Common bottlenose dolphin | F | adult | Spleen | 3.61 | Atlantic | Stranded |
| Hubbs-1319-Tt | *Tursiops truncatus* | Common bottlenose dolphin | M | adult | Spleen | 3.28 | Atlantic | Stranded |
| Hubbs-1332-Tt | *Tursiops truncatus* | Common bottlenose dolphin | F | adult | Spleen | 3.15 | Atlantic | Stranded |
| Hubbs-13108-Tt | *Tursiops truncatus* | Common bottlenose dolphin | M | adult | Spleen | 3.77 | Atlantic | Stranded |
| Hubbs-13109-Tt | *Tursiops truncatus* | Common bottlenose dolphin | M | adult | Spleen | 3.66 | Atlantic | Stranded |
| SW101050 | *Tursiops truncatus* | Common bottlenose dolphin | F | sub-adult | Spleen | 3.59 | Pacific | Stranded |
| SWFa1601B | *Feresa attenuata* | Pygmy killer whale | F | juvenile | Spleen | 3.36 | Atlantic | Stranded |
| SWSL1601B | *Stenella longirostris* | Spinner dolphin | F | adult | Spleen | 3.64 | Atlantic | Stranded |
| SWSL1602B | *Stenella longirostris* | Spinner dolphin | M | adult | Spleen | 3.25 | Atlantic | Stranded |
| Hubbs-1215-Kb | *Kogia breviceps* | Pygmy sperm whale | M | adult | Spleen | 3.66 | Atlantic | Stranded |
| Hubbs-1126-Kb | *Kogia breviceps* | Pygmy sperm whale | F | adult | Spleen | 3.73 | Atlantic | Stranded |
| Hubbs-1127-Kb | *Kogia breviceps* | Pygmy sperm whale | M | calf | Spleen | 3.32 | Atlantic | Stranded |
| Hubbs-1224-Kb | *Kogia breviceps* | Pygmy sperm whale | M | adult | Spleen | 3.19 | Atlantic | Stranded |
| Hubbs-1141-Ks | *Kogia sima* | Dwarf sperm whale | F | adult | Spleen | 3.51 | Atlantic | Stranded |
| SW120552 | *Delphinapterus leucas* | Beluga, white whale | F | calf | Spleen | 3.63 |  | Managed care |
| SW140560 | *Delphinapterus leucas* | Beluga, white whale | F | adult | Spleen | 3.46 |  | Managed care |
| Hubbs-1105-Md | *Mesoplodon densirostris* | Blainville's beaked whale | M | adult | Spleen | 4.44 | Atlantic | Stranded |
| Hubbs-0822-Me | *Mesoplodon europaeus* | Gervais' beaked whale | F | adult | Spleen | 4.03 | Atlantic | Stranded |
| Hubbs-1006-Me | *Mesoplodon europaeus* | Gervais' beaked whale | F | adult | Spleen | 3.97 | Atlantic | Stranded |
| Hubbs-1121 | *Ziphius cavirostris* | Cuvier's beaked whale | F | juvenile | Spleen | 4.66 | Atlantic | Stranded |
| TMMC: C-233 | *Physeter macrocephalus* | Sperm Whale | M | calf | Spleen | 3.44 | Pacific | Stranded |
| SWF-Eb-0705-B | Mammalia | *Erignathus barbatus* | M | adult | Spleen | 2.96 |  | Managed care |
| BGT54209 | *Hippopotamus amphibius* | Hippopotamus | F | Adult | Spleen | 3.39 |  | Managed care |