

Table S2. List of chimerical Operational Taxonomic Units (OTUs)

Convoluta: *Convoluta pulchra*, *Convoluta roscoffensis*
Hydra: *Hydra magnipapillata*, *Hydra vulgaris*
Acropora: *Acropora millepora*, *Acropora palmata*, *Montastraea faveolata*
Hydractinia: *Hydractinia echinata*, *Podocoryne carneae*
Suberites: *Suberites domuncula*, *Suberites fuscus*
Homo: *Homo sapiens*, *Mus musculus*, *Rattus norvegicus*, *Macaca fascicularis*, *Bos taurus*, *Canis familiaris*
Eptatretus: *Eptatretus burgeri*, *Myxine glutinosa*
Petromyzon: *Petromyzon marinus*, *Lethenteron japonicum*, *Lethenteron reissneri*
Branchiostoma: *Branchiostoma floridae*, *Branchiostoma belcheri*, *Branchiostoma lanceolatum*
Ciona: *Ciona intestinalis*, *Ciona savignyi*
Strongylocentrotus: *Strongylocentrotus purpuratus*, *Paracentrotus lividus*,
 Hemicentrotus pulcherrimus
Asterina: *Asterina pectinifera*, *Solaster stimpsonii*
Spadella: *Spadella cephaloptera*, *Flaccisagitta enflata*
Aplysia: *Aplysia californica*, *Biomphalaria glabrata*, *Lymnaea stagnalis*, *Haliotis discus*
Crassostrea : *Crassostrea virginica*, *Crassostrea gigas*, *Mytilus galloprovincialis*,
 Mytilus edulis
Argopecten: *Argopecten irradians*, *Pecten maximus*, *Chlamys farreri*
Schmidtea: *Schmidtea mediterranea*, *Dugesia ryukyuensis*, *Dugesia japonica*
Schistosoma: *Schistosoma mansoni*, *Schistosoma japonicum*
Echinococcus: *Echinococcus granulosus*, *Echinococcus multilocularis*
Helobdella: *Helobdella robusta*, *Haementeria depressa*
Lumbricus: *Lumbricus rubellus*, *Eisenia andrei*
Ixodes: *Ixodes scapularis*, *Ixodes pacificus*
Daphnia: *Daphnia pulex*, *Daphnia magna*
Hypsibius: *Hypsibius dujardini*, *Macrobiotus islandicus*, *Richtersius coronifer*
Brugia: *Brugia malayi*, *Wuchereria bancrofti*, *Litomosoides sigmodontis*, *Dirofilaria immitis*, *Onchocerca volvulus*, *Ascaris suum*, *Toxocara canis*