

**Supplementary Table 1.** Taxa included in the largest dataset (dataset 1; see Methods). Phylum, scientific name, taxon code in the analyses, type of data (genome or transcriptome) and accession number are indicated for each taxon.

Phylum	Scientific name	Taxon Code	Genome/Transcriptome	Accession Number
Acoela	<i>Childia submaculatum</i>	ACOE_Chil	Transcriptome	SRX1534054
Acoela	<i>Convolutriloba macropyla</i>	ACOE_Conv	Transcriptome	SRX1343815
Acoela	<i>Diopisthoporus gymnopharyngeus</i>	ACOE_Diog	Transcriptome	SRX1534055
Acoela	<i>Diopisthoporus longitubus</i>	ACOE_Diol	Transcriptome	SRR3105704
Acoela	<i>Eumecynostomum macrobursalium</i>	ACOE_Eumc	Transcriptome	SRX1534057
Acoela	<i>Hofstenia miamia</i>	ACOE_Hmia2	Transcriptome	SRR1208932
Acoela	<i>Isodiametra pulchra</i>	ACOE_Isop	Transcriptome	SRX3469680
Acoela	<i>Neochildia fusca</i>	ACOE_Nfus	Transcriptome	SRR8617822
Acoela	<i>Symsagittifera roscoffensis</i>	ACOE_Sros	Transcriptome	SRR827579
Annelida	<i>Capitella teleta</i>	ANNE_Capitella _teleta	Genome	PRJNA175705
Annelida	<i>Diurodrilus subterraneus</i>	ANNE_Diur	Transcriptome	SRR2131612
Annelida	<i>Helobdella robusta</i>	ANNE_Helobdella _robusta	Genome	PRJNA259764
Annelida	<i>Lobatocerebrum sp.</i>	ANNE_Loba	Transcriptome	SRR2131397
Annelida	<i>Lumbricus rubellus</i>	ANNE_Lrub	Transcriptome	SRR923752
Annelida	<i>Marphysa bellii</i>	ANNE_Mbel	Transcriptome	SRR1232821
Annelida	<i>Magelona johnstoni</i>	ANNE_Mjoh	Transcriptome	SRR1222290
Annelida	<i>Myzostomatidae sp.</i>	ANNE_Myzo	Transcriptome	SRR2008168
Annelida	<i>Nephtys caeca</i>	ANNE_Ncae	Transcriptome	SRR1232685
Annelida	<i>Owenia fusiformis</i>	ANNE_Ofus	Transcriptome	SRX1015948
Annelida	<i>Paramphinome jeffreysii</i>	ANNE_Pamp	Transcriptome	SRR1257731
Annelida	<i>Phylo foetida</i>	ANNE_Pfoe	Transcriptome	SRR1222216
Annelida	<i>Phyllochaetopterus sp.</i>	ANNE_Phyl	Transcriptome	SRR1257898
Annelida	<i>Phascolopsis sp.</i>	ANNE_Plcs	Transcriptome	SRR1654498
Arthropoda	<i>Acyrtosiphon pisum</i>	ARTH_Acyrtosiphon _pisum	Genome	PRJNA29489
Arthropoda	<i>Anoplodactylus insignis</i>	ARTH_Ains	Transcriptome	SRR5237777

Arthropoda	<i>Apis mellifera</i>	ARTH_Amel	Genome	PRJNA477511
Arthropoda	<i>Anopheles gambiae</i>	ARTH_Anopheles_gambiae	Genome	PRJNA163
Arthropoda	<i>Belgica antarctica</i>	ARTH_Belgica_antarctica	Genome	PRJNA172148
Arthropoda	<i>Calanus finmarchicus</i>	ARTH_Cfin	Transcriptome	SRX2085862
Arthropoda	<i>Culex quinquefasciatus</i>	ARTH_Culex_quinquefasciatus	Genome	PRJNA29017
Arthropoda	<i>Daphnia pulex</i>	ARTH_Dpul	Genome	PRJNA12756
Arthropoda	<i>Drosophila melanogaster</i>	ARTH_Dmel	Genome	PRJNA13812
Arthropoda	<i>Eudigraphis taiwanensis</i>	ARTH_Etai	Transcriptome	SRR3458640
Arthropoda	<i>Eurytemora affinis</i>	ARTH_Eurytemora_affinis	Genome	PRJNA423276
Arthropoda	<i>Folsomia candida</i>	ARTH_Fcan	Transcriptome	SRX321913
Arthropoda	<i>Fenneropenaeus merguensis</i>	ARTH_Fmer	Transcriptome	SRR1756093
Arthropoda	<i>Glomeris marginata</i>	ARTH_Gmar	Transcriptome	SRR3233211
Arthropoda	<i>Ixodes scapularis</i>	ARTH_Isca	Genome	PRJNA34667
Arthropoda	<i>Lepeophtheirus salmonis</i>	ARTH_Lepeophtheirus_salmonis	Genome	PRJNA280127
Arthropoda	<i>Limulus polyphemus</i>	ARTH_Limu	Genome	PRJNA238073
Arthropoda	<i>Parasteatoda tepidariorum</i>	ARTH_Parasteatoda_tepidariorum	Genome	PRJNA316108
Arthropoda	<i>Sarcoptes scabiei</i>	ARTH_Sarcoptes_scabiei	Genome	PRJNA268368
Arthropoda	<i>Scutigera coleoptrata</i>	ARTH_Scuti	Transcriptome	SRX462011
Arthropoda	<i>Stegodyphus mimosarum</i>	ARTH_Smim	Genome	PRJNA222714
Arthropoda	<i>Strigamia maritima</i>	ARTH_Strigamia_maritima	Genome	PRJNA20501
Brachiopoda	<i>Glottidia pyramidata</i>	BRAC_Gpyr	Transcriptome	SRX731468
Brachiopoda	<i>Hemithiris psittacea</i>	BRAC_Hpst	Transcriptome	SRX731469

Brachiopoda	<i>Kraussina rubra</i>	BRAC_Krub	Transcriptome	SRX1122037
Brachiopoda	<i>Lingula anatina</i>	BRAC_Lana	Genome	PRJNA293030
Brachiopoda	<i>Novocrania anomala</i>	BRAC_Nvcn	Transcriptome	SRX1343816
Brachiopoda	<i>Terebratalia transversa</i>	BRAC_Ttvs	Transcriptome	SRX1307070
Bryozoa	<i>Bugula stolonifera</i>	BRYO_Bstl	Transcriptome	SRX6428326
Bryozoa	<i>Flustrellidra corniculata</i>	BRYO_Fcor	Transcriptome	SRX6428327
Bryozoa	<i>Heteropora pacifica</i>	BRYO_Hpac	Transcriptome	SRX6441460
Bryozoa	<i>Membranipora membranacea</i>	BRYO_Mmem	Transcriptome	SRX1121923
Cephalochordata	<i>Asymmetron lucayanum</i>	CEPH_Aluc	Transcriptome	SRX1444258
Cephalochordata	<i>Branchiostoma floridae</i>	CEPH_Bflo	Genome	PRJNA33245
Cephalochordata	<i>Branchiostoma belcheri</i>	CEPH_Branchiostoma_belcheri	Genome	PRJNA358734
Chaetognatha	<i>Sagitta elegans</i>	CHAE_Selg	Transcriptome	SRX4610655
Chaetognatha	<i>Spadella cephaloptera</i>	CHAE_Spdl	Transcriptome	SRX4610647
Cnidaria	<i>Acropora digitifera</i>	CNID_Adig	Genome	PRJNA314803
Cnidaria	<i>Abylopsis tetragona</i>	CNID_Atet	Transcriptome	SRX288276
Cnidaria	<i>Craspedacusta sowerbyi</i>	CNID_Csow	Transcriptome	SRX1988389
Cnidaria	<i>Gorgonia ventalina</i>	CNID_Gven	Transcriptome	SRX177804
Cnidaria	<i>Hydra vulgaris</i>	CNID_Hydra_vulgaris	Genome	PRJNA31231
Cnidaria	<i>Nematostella vectensis</i>	CNID_Nvec	Genome	PRJNA19965
Cnidaria	<i>Orbicella faveolata</i>	CNID_Orbicella_alveolata	Genome	PRJNA381078
Cnidaria	<i>Polypodium hydriforme</i>	CNID_Phyd	Transcriptome	SRX687102
Cnidaria	<i>Stomolophus meleagris</i>	CNID_Smel	Transcriptome	SRX470083
Cnidaria	<i>Stylophora pistillata</i>	CNID_Stylophora_pistillata	Genome	PRJNA415215
Cnidaria	<i>Thelohanellus kitauei</i>	CNID_Thelohanellus_kitauei	Genome	PRJNA193083
Craniata	<i>Balearica regulorum</i>	CRAN_Balearica_regulorum	Genome	PRJNA264996

Craniata	<i>Callorhincus milii</i>	CRAN_Cmil	Transcriptome	SRX154857
Craniata	<i>Danio rerio</i>	CRAN_Drer	Genome	PRJNA13922
Craniata	<i>Gekko japonicus</i>	CRAN_Gekko_j aponicus	Genome	PRJNA308133
Craniata	<i>Gallus gallus</i>	CRAN_Ggal	Genome	PRJNA10808
Craniata	<i>Gorilla gorilla</i>	CRAN_Gorilla_g orilla	Genome	PRJNA169344
Craniata	<i>Homo sapiens</i>	CRAN_Hsap	Genome	PRJNA168
Craniata	<i>Latimeria chalumnae</i>	CRAN_Lcha	Genome	PRJNA219830
Craniata	<i>Limosa lapponica</i>	CRAN_Limosa_l apponica	Genome	PRJNA321163
Craniata	<i>Mus musculus</i>	CRAN_Mmus	Genome	PRJNA169344
Craniata	<i>Parus major</i>	CRAN_Pmar	Genome	PRJNA312399
Craniata	<i>Poecilia mexicana</i>	CRAN_Poecilia_ mexicana	Genome	PRJNA305619
Craniata	<i>Rana catesbeiana</i>	CRAN_Rana_ca tesbeiana	Genome	PRJNA285814
Craniata	<i>Scopththalmus maximus</i>	CRAN_Scopthth almus_maximus	Genome	PRJEB11743
Ctenoph ora	<i>Beroe abyssicola</i>	CTEN_Baby	Transcriptome	SRX250323
Ctenoph ora	<i>Euplokamis dunlapae</i>	CTEN_Edun	Transcriptome	SRX250313
Ctenoph ora	<i>Mnemiopsis leidy</i>	CTEN_Mnemiop sis_leidy	Genome	PRJNA64405
Ctenoph ora	<i>Pleurobrachia bachei</i>	CTEN_Pleurobr achia_bachei	Genome	PRJNA213480
Ctenoph ora	<i>Vallicula multiformis</i>	CTEN_Vmul	Transcriptome	SRX1716825
Cyclioph ora	<i>Symbion pandora</i>	CYCL_SyRN	Transcriptome	SRX1531719
Cyclioph ora	<i>Symbion cf. americanus</i>	CYCL_Symb	Transcriptome	SRX6429431
Dyciemi da	<i>Dyciema sp.</i>	DICY_Dyciema_ sp	Transcriptome	SRX265465
Dyciemi da	<i>Dyciema japonicum</i>	DICY_Dyciema_ japonica	Transcriptome	DRX051953
Echinod ermata	<i>Acanthaster planci</i>	ECHI_Acanthast er_planci	Genome	PRJNA397419
Echinod ermata	<i>Apostichopus japonicus</i>	ECHI_Aposticho pus_japonicus	Genome	SRR1185973
Echinod ermata	<i>Euclidaris tribuloides</i>	ECHI_Etri	Transcriptome	SRX1392319

Echinodermata	<i>Holothuria glaberrima</i>	ECHI_Hgla	Transcriptome	SRX4893169
Echinodermata	<i>Lytechinus variegatus</i>	ECHI_Lvar	Genome	PRJNA62399
Echinodermata	<i>Ophiocoma echinata</i>	ECHI_Oech	Transcriptome	SRX445856
Echinodermata	<i>Oxycomanthus japonicus</i>	ECHI_Ojap	Transcriptome	SRX447395
Echinodermata	<i>Ophioderma longicauda</i>	ECHI_Olon	Transcriptome	SRX2464216
Echinodermata	<i>Patiria miniata</i>	ECHI_Pmin	Genome	PRJNA49323
Echinodermata	<i>Sclerodactyla briareus</i>	ECHI_Sbria	Transcriptome	SRX445858
Echinodermata	<i>Strongylocentrotus purpuratus</i>	ECHI_Spur	Genome	PRJNA13728
Entoprocta	<i>Barentsia gracilis</i>	ENTO_Bgra	Transcriptome	SRX731475
Entoprocta	<i>Loxosoma pectinaricola</i>	ENTO_Loxp	Transcriptome	SRX731476
Entoprocta	<i>Loxomitra sp.</i>	ENTO_Lxmt	Transcriptome	SRX6354877
Entoprocta	<i>Pedicellina sp. FHL</i>	ENTO_PclF	Transcriptome	SRR8641402
Gastrotricha	<i>Diuronotus sp.</i>	GAST_Dnot	Transcriptome	SRX1121926
Gastrotricha	<i>Lepidodermella squamata</i>	GAST_Lepi	Transcriptome	SRX534865
Gastrotricha	<i>Macrodasys sp.</i>	GAST_Mdas	Transcriptome	SRX534826
Gastrotricha	<i>Megadasys sp.</i>	GAST_Megd	Transcriptome	SRX534835
Gnathostomulida	<i>Austrognathia sp.</i>	GNAT_Augn	Transcriptome	SRX997150
Gnathostomulida	<i>Gnathostomulidae sp.</i>	GNAT_Gnat	Transcriptome	SRR1271607
Gnathostomulida	<i>Tenuignathia rikerae</i>	GNAT_Trik	Transcriptome	SRX6430999
Hemichordata	<i>Cephalodiscus gracilis</i>	HEMI_Cgra	Transcriptome	SRR1695473
Hemichordata	<i>Ptychodera bahamensis</i>	HEMI_Pbah	Transcriptome	SRR1695458
Hemichordata	<i>Ptychodera flava</i>	HEMI_Ptychodera_flava	Genome	PRJDB3182

Hemichordata	<i>Saccoglossus kowalevskii</i>	HEMI_Saccoglossus_kowalevskii	Genome	PRJNA42857
Hemichordata	<i>Schizocardium cf. braziliense</i>	HEMI_Sbra	Transcriptome	SRR1695467
Hemichordata	<i>Torquaratoridae sp. Antarctica</i>	HEMI_Tbah	Transcriptome	SRR1695469
Kinorhyncha	<i>Echinoderes dujardini</i>	KINO_Eduj	Transcriptome	PRJNA523695
Kinorhyncha	<i>Pycnophyes kielensis</i>	KINO_Pkie	Transcriptome	SRX448021
Loricifera	<i>Armorloricus elegans</i>	LORI_Arc	Transcriptome	SRX1120677
Micrognathozoa	<i>Limnognathia maerski</i>	MICR_Limn	Transcriptome	SRX1121929
Mollusca	<i>Biomphalaria glabrata</i>	MOLL_Biomphalaria_glabrata	Genome	PRJNA290623
Mollusca	<i>Crassostrea gigas</i>	MOLL_Crassostrea_gigas	Genome	PRJNA276446
Mollusca	<i>Chiton olivaceus</i>	MOLL_Cton	Transcriptome	SRX205322
Mollusca	<i>Hydatina physis</i>	MOLL_Hphy	Transcriptome	SRX644677
Mollusca	<i>Lottia gigantea</i>	MOLL_Lottia_gigantea	Genome	PRJNA259762
Mollusca	<i>Leptochiton rugatus</i>	MOLL_Lrug	Transcriptome	SRX731464
Mollusca	<i>Monodonta labio</i>	MOLL_Mlab	Transcriptome	SRX64468
Mollusca	<i>Neomenia carinata</i>	MOLL_Nmna	Transcriptome	SRX1049974
Mollusca	<i>Nautilus pompilus</i>	MOLL_Npom	Transcriptome	SRX2867110
Mollusca	<i>Octopus bimaculoides</i>	MOLL_Obim	Genome	PRJNA305125
Mollusca	<i>Proneomenia custodiens</i>	MOLL_Pcus	Transcriptome	SRX729551
Mollusca	<i>Pomacea caniculata</i>	MOLL_Pomacea_caniculata	Genome	PRJNA471795
Mollusca	<i>Solemya velum</i>	MOLL_Svel	Transcriptome	SRX091478
Nematozoa	<i>Caenorhabditis elegans</i>	NEMA_Celg	Genome	PRJNA158
Nematozoa	<i>Diploscapter pachys</i>	NEMA_Diploscapter_pachys	Genome	PRJNA280107
Nematozoa	<i>Haemonchus contortus</i>	NEMA_Hcon	Genome	PRJEB506
Nematozoa	<i>Loa loa</i>	NEMA_Lloa	Genome	PRJNA60051
Nematozoa	<i>Pristionchus pacificus</i>	NEMA_Ppac	Genome	PRJNA12644

Nemato da	<i>Panagrellus redivivus</i>	NEMA_Pred	Genome	PRJNA186477
Nemato da	<i>Romanomermis culicivorax</i>	NEMA_Rcul	Genome	PRJEB1358
Nemato da	<i>Strongyloides ratti</i>	NEMA_Strongyloides_ratti	Genome	PRJNA304930
Nemato da	<i>Trichuris muris</i>	NEMA_Tmur	Genome	PRJNA304929
Nemato da	<i>Trichinella patagoniensis</i>	NEMA_Trichinella_patagonensis	Genome	PRJNA257433
Nemato da	<i>Trichinella spiralis</i>	NEMA_Tspi	Genome	PRJNA66457
Nemertea	<i>Argonemertes australiensis</i>	NEME_Aaus	Transcriptome	SRX646169
Nemertea	<i>Baseodiscus unicolor</i>	NEME_Buni	Transcriptome	SRX644738
Nemertea	<i>Carinoma hamanako</i>	NEME_Cham	Transcriptome	SRX643224
Nemertea	<i>Hubrechtella ijimai</i>	NEME_Hiji	Transcriptome	SRX644663
Nemertea	<i>Notospermus geniculatus</i>	NEME_Notospermus_geniculatus	Genome	PRJNA393252
Nemertea	<i>Protopelagonemertes beebei</i>	NEME_Peeb	Transcriptome	SRX646186
Nematomorpha	<i>Paragordius varius</i>	NEMM_Gord	Transcriptome	ERP021314
Nematomorpha	<i>Nectonema munidae</i>	NEMM_Nect	Transcriptome	PRJNA523701
Nemertodermatida	<i>Ascoparia sp.</i>	NEMO_Aasco	Transcriptome	SRX1343822
Nemertodermatida	<i>Flagellophora sp. Bocas</i>	NEMO_Flag	Transcriptome	SRR8641368
Nemertodermatida	<i>Meara stichopi</i>	NEMO_Mers	Transcriptome	SRX1343814
Nemertodermatida	<i>Nemertoderma westbladi</i>	NEMO_Nemw	Transcriptome	SRX1343819
Onychophora	<i>Ooperipatellus sp.</i>	ONYC_Oope	Transcriptome	PRJNA523702
Onychophora	<i>Peripatopsis overbergiensis</i>	ONYC_Pcap	Transcriptome	SRX451023
Onychophora	<i>Peripatooides sp.</i>	ONYC_Pept	Transcriptome	PRJNA523703

Onychophora	<i>Epipeperipatus</i> sp.	ONYC_Per	Transcriptome	PRJNA523712
Orthonectida	<i>Intoshia lineai</i>	ORTH_Intoshia_linei	Genome	PRJNA316116
Phoronida	<i>Phoronopsis harmeri</i>	PHOR_Ph	Transcriptome	SRX1121914
Phoronida	<i>Phoronis australis</i>	PHOR_Pharonis_australis	Genome	PRJNA393252
Phoronida	<i>Phoronis psammophila</i>	PHOR_Ppsa	Transcriptome	SRX731473
Placozoa	<i>Hoilungia hongkongensis</i>	PLAC_Hoilungia	Genome	<a href="https://bitbucket.org/molpalmuc/hoilungia-genome/downloads/">https://bitbucket.org/molpalmuc/hoilungia-genome/downloads/</a>
Placozoa	<i>Trichoplax adhaerens</i>	PLAC_Tadh	Genome	PRJNA30931
Platyhelminthes	<i>Bothrioplana semperi</i>	PLAT_Bsem	Transcriptome	SRX980750
Platyhelminthes	<i>Echinococcus multilocularis</i>	PLAT_Ecmu	Genome	PRJNA308738
Platyhelminthes	<i>Geocentrophora applanata</i>	PLAT_Gapp	Transcriptome	SRX981000
Platyhelminthes	<i>Gnosonesimida</i> sp. IV	PLAT_Gnos	Transcriptome	SRX997152
Platyhelminthes	<i>Hymenolepis microstoma</i>	PLAT_Hymenolepis_microstoma	Genome	PRJNA308734
Platyhelminthes	<i>Macrostomum lignano</i>	PLAT_Macrostomum_lignano	Genome	PRJNA371498
Platyhelminthes	<i>Monocelis fusca</i>	PLAT_Mfus	Transcriptome	SRX998836
Platyhelminthes	<i>Prostheceraeus vittatus</i>	PLAT_Pvit	Transcriptome	SRX999630
Platyhelminthes	<i>Rhynchomesostoma rostratum</i>	PLAT_Rros	Transcriptome	SRX999311
Platyhelminthes	<i>Schmidtea mediterranea</i>	PLAT_Schmidtea_mediterranea	Genome	PRJNA379262
Platyhelminthes	<i>Stenostomum leucops</i>	PLAT_Sleu	Transcriptome	SRX951992
Platyhelminthes	<i>Schistosoma mansoni</i>	PLAT_Sman	Genome	PRJNA39937
Porifera	<i>Amphimedon queenslandica</i>	PORI_Aque	Genome	PRJNA66531
Porifera	<i>Aphrocallistes vastus</i>	PORI_Avas	Transcriptome	SRX404392
Porifera	<i>Corticium candelabrum</i>	PORI_Ccan	Transcriptome	SRX148422
Porifera	<i>Clathrina clathrus</i>	PORI_Ccla	Transcriptome	ERX1845173
Porifera	<i>Crella elegans</i>	PORI_Cele	Transcriptome	SRX216926



Porifera	<i>Chondrilla nucula</i>	PORI_Cnuc	Transcriptome	ERX1842676
Porifera	<i>Cliona varians</i>	PORI_Cvar	Transcriptome	SRX333053
Porifera	<i>Ircinia fasciculata</i>	PORI_Ifas	Transcriptome	SRX4517958
Porifera	<i>Oscarella carmela</i>	PORI_Oscarella_carmela	Genome	<a href="http://www.compagen.org/datasets.html">http://www.compagen.org/datasets.html</a>
Porifera	<i>Petrosia ficiformis</i>	PORI_Pfic	Transcriptome	SRX151865
Porifera	<i>Pseudospongosorites suberitoides</i>	PORI_Psub	Transcriptome	SRX468859
Porifera	<i>Sycon coactum</i>	PORI_Scoa	Transcriptome	SRX151867
Porifera	<i>Spongilla lacustris</i>	PORI_Slac	Transcriptome	SRX470277
Porifera	<i>Stylisha carteri</i>	PORI_Stylisha_carteri	Transcriptome	<a href="http://www.compagen.org/datasets.html">http://www.compagen.org/datasets.html</a>
Porifera	<i>Sycon ciliatum</i>	PORI_Sycon_ciliatum	Transcriptome	<a href="http://www.compagen.org/datasets.html">http://www.compagen.org/datasets.html</a>
Porifera	<i>Xestospongia testudinaria</i>	PORI_Xestospongia_testudinaria	Transcriptome	<a href="http://www.compagen.org/datasets.html">http://www.compagen.org/datasets.html</a>
Priapulida	<i>Meiopriapulus fijiensis</i>	PRIA_Meio	Transcriptome	PRJNA438779
Priapulida	<i>Priapulus caudatus</i>	PRIA_Priapulus_caudatus	Genome	PRJNA303167
Rotifera	<i>Adineta vaga</i>	ROTI_Avag	Genome	PRJEB1171
Rotifera	<i>Brachionus calyciflorus</i>	ROTI_Bcal	Genome	PRJNA404029
Rotifera	<i>Echinorhynchus gadi</i>	ROTI_Egad	Transcriptome	SRX1121912
Rotifera	<i>Macracanthorhynchus hirudinaceus</i>	ROTI_Mhir	Transcriptome	ERX420859
Rotifera	<i>Rotaria rotatoria</i>	ROTI_Rrot	Transcriptome	ERX420860
Tardigrada	<i>Echiniscus testudo</i>	TARD_Echiniscus	Transcriptome	MH550112
Tardigrada	<i>Hypsibius dujardini</i>	TARD_Hypsibius_dujardini	Genome	PRJNA360556
Tardigrada	<i>Millnesium tardigradum</i>	TARD_Mtar	Transcriptome	SRX2662933
Tardigrada	<i>Paramacrobiotus richtersi</i>	TARD_Prigh	Transcriptome	MH550113
Tardigrada	<i>Ramazzotius varieornatus</i>	TARD_Ramazzotius_varieornatus	Genome	PRJNA348338
Tardigrada	<i>Ramazzotius sp.</i>	TARD_Rama	Transcriptome	SRX2528404
Urochordata	<i>Ciona intestinalis</i>	UROC_Ciona_intestinalis	Genome	PRJNA187185

Urochor data	<i>Oikopleura dioica</i>	UROC_Oikopleura_dioica	Genome	PRJNA36567
Xenoturbellida	<i>Xenoturbella bocki</i>	XENO_XbJC	Transcriptome	SRX134381
<b>OUTGROUPS</b>				
Fungi	<i>Saccharomyces cerevisiae</i>	ZOUT_Saccharomyces	Genome	UP000002311
Fungi	<i>Spizellomyces punctatus</i>	ZOUT_Spizellomyces	Genome	UP000053201
Fungi	<i>Allomyces macrogynus</i>	ZOUT_Allomyces	Genome	UP000054350
Nucleariidae	<i>Fonticula alba</i>	ZOUT_Fonticula	Genome	UP000030693
Nucleariidae	<i>Parvularia atlantis</i>	ZOUT_Parvularia	Transcriptome	SRR1617645
Corallochytrea	<i>Corallochytrium limacisporum</i>	ZOUT_Corallochytrium	Genome	<a href="https://figshare.com/articles/Genome_-_Corallochytrium_limacisporum/5426470">https://figshare.com/articles/Genome_-_Corallochytrium_limacisporum/5426470</a>
Ichthyospora, Dermocystida	<i>Chromosphaera perkinsii</i>	ZOUT_Chromosphaera	Genome	<a href="https://figshare.com/articles/Genome_-_Chromosphaera_perkinsii/5426494">https://figshare.com/articles/Genome_-_Chromosphaera_perkinsii/5426494</a>
Ichthyospora, Ichthyophonida	<i>Creolimax fragrantissima</i>	ZOUT_Creolimax_fragrantissima	Genome	PRJNA377365
Ichthyospora, Ichthyophonida	<i>Abeoforma whisleri</i>	ZOUT_Abeoforma	Genome	<a href="https://figshare.com/articles/Genome_-_Abeoforma_whisleri_/5426458">https://figshare.com/articles/Genome_-_Abeoforma_whisleri_/5426458</a>
Ichthyospora, Ichthyophonida	<i>Ichthyophonus hoferi</i>	ZOUT_Ichthyophonus	Genome	<a href="https://figshare.com/articles/Genome_-_Ichthyophonus_hoferi/5426488">https://figshare.com/articles/Genome_-_Ichthyophonus_hoferi/5426488</a>
Ichthyospora, Ichthyophonida	<i>Pirum gemmata</i>	ZOUT_Pirum	Genome	<a href="https://figshare.com/articles/Genome_-_Pirum_gemmata/5426506">https://figshare.com/articles/Genome_-_Pirum_gemmata/5426506</a>
Ichthyospora, Ichthyophonida	<i>Sphaeroforma arctica</i>	ZOUT_Sphaeroforma	Genome	PRJNA20463
Filasterea	<i>Capsaspora owczarzkii</i>	ZOUT_Capsaspora	Genome	PRJNA193613

Choanoflagellata	<i>Monosiga bervicollis</i>	ZOUT_Monosiga	Genome	PRJNA28133
Choanoflagellata	<i>Salpingoeca rosetta</i>	ZOUT_Salpingoeca	Genome	PRJNA193541