S4 Table. Species included in comparative analysis.

Species name	**Common name**	**Phylum**	**Genome span (Mb)**	**Scaffold N50 (kb)**	**Number of genes**[1]	**Accession**
Aplysia californica	California sea hare	Mollusca	927.3	91.7 kb	21,312	GCA_000002075.2 [1]
Biomphalaria glabrata	Freshwater snail	Mollusca	916.4	48.1 kb	28,551	GCA_000457365.1 [2]
Caenorhabditis elegans	Roundworm	Nematoda	100.3	17.5 kb	20,222	GCF_000002985.6 [3]
Capitella teleta	Annelid worm	Annelida	333.3	188.4 kb	32,175	GCA_000328365.1 [4]
Crassostrea gigas	Pacific oyster	Mollusca	557.7	401.7 kb	26,101	GCA_000297895.1 [5]
Drosophila melanogaster	Fruit fly	Arthropoda	143.7	25,286.9 kb	13,931	GCA_000001215.4 [6]
Helobdella robusta	Leech	Annelida	235.4	3,060.2 kb	23,432	GCA_000326865.1 [4]
Intoshia linei	NA	Orthonectida	41.6	26.3 kb	8,724	GCA_001642005.1 [7]
Lingula anatina	Lampshell	Brachiopoda	425.5	294.5 kb	34,105	GCA_001039355.1 [8]
Lottia gigantea	Owl limpet	Mollusca	359.5	1,870.1 kb	23,349	GCA_000327385.1 [4]

Octopus bimaculoides	Octopus	Mollusca	2338.2	475.2 kb	33,609	GCA_001194135.1 [9]
Ramazzottius varieornatus	Water bear	Tardigrada	55.8	474.0 kb	19,521	GCA_001949185.1 [10]
Schistosoma haematobium	Blood fluke	Platyhelminthes	375.9	317.5 kb	13,073	GCA_000699445.1 [11]

[1] Inferred from Ensembl Metazoa or the literature.

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