



AquaBiomics tankDNA Test Report



About this report

Generated on: Thu Dec 14 15:39:29 2023

This report summarizes an analysis of [eDNA \(environmental DNA\)](#) in an aquarium water sample. Universal genetic markers were amplified from [Eukaryotic](#) DNA in the sample, and thousands of individual DNA molecules from this mixture were sequenced. Each sequence was then compared with public DNA databases to identify its origin.

This report summarizes the kinds of organisms detected in this sample, with a special focus on pathogens and parasites of concern in the saltwater aquarium industry and hobby. If you have any questions about this report, please check the [FAQ](#).

Information about the sample

Sample ID	1001133
Sample Name	Tank DNA
Tank Name	Office Nano
Sample Date	10/30/23 @ 11:35 am

Parasites

Parasite	Disease	Your level (Percentile)	Prevalence
Uronema marinum	Uronema	0.61% (84.3)	9.4

Note:

Levels are expressed as percent of DNA sequences matching each source. Percentiles reflect the percent of samples in which this parasite was present at lower levels than your sample. Prevalence indicates the percent of samples tested that contained this parasite.

► [View the full table](#)

Dinoflagellates

This sample contained low levels of DNA from dinoflagellates (3.5%) - this is normal and does not suggest a problem.

► [View all Dinoflagellates](#)

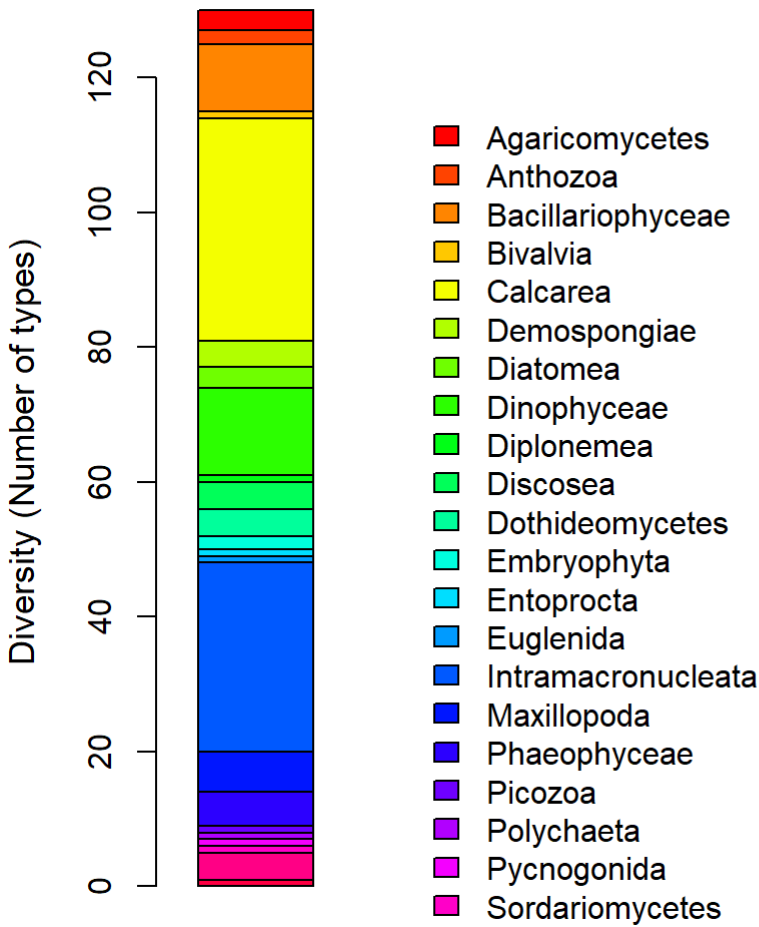
Diatoms

This sample contained low levels of DNA from diatoms (3.8%) - this is normal and does not suggest a problem.

► View all Diatoms

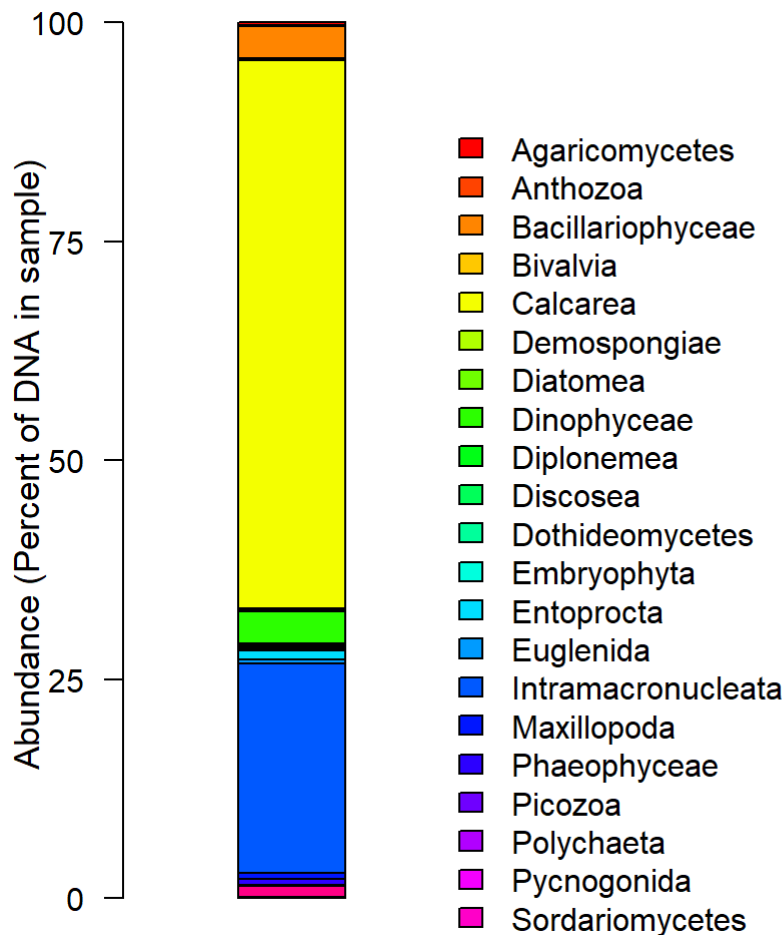
Eukaryotic Biodiversity

Diversity (Number of different types)	187
Number of Phyla	15
Number of Classes	23



This graph shows the diversity of each Eukaryotic group in the DNA sample. Each slice represents a different Class, and the size of the slice is proportional to the number of different types in that class. Unidentified sequences lacking any match in public databases are not shown.

Sample Composition



This graph shows the relative abundance of each Eukaryotic group in the DNA sample. Each slice represents a different Class, and the size of the slice is proportional to the fraction of DNA in the sample from that class. Unidentified sequences lacking any match in public databases are not shown.

Complete list of Eukaryotes identified

These tables show all DNA sequences from your sample that we were able to identify based on comparison with public DNA sequence databases. Unknown DNA sequences without any matches in the databases are not shown. “Type” is an arbitrary ID number assigned to each unique sequence found in our database of aquarium samples.

▼ Complete Table

[Agaricomycetes](#) (Fungi)

Type	Percent of eDNA	Family	Name
sq2143	0.171	Atheliaceae	Trametes versicolor
sq190299	0.140	Corticaceae	Sistotrema raduloides
sq195099	0.016	Atheliaceae	Trametes versicolor

[Anthozoa](#) (Corals, Anemones)

Type	Percent of eDNA	Family	Name
sq191642	0.078	Scleractinia	Favites halicora
sq195100	0.016	Scleractinia	Platygyra daedalea

Note:

The marker used here does not provide species-level resolution for many corals, so the species names shown here may be incorrect. However these classifications are typically correct at higher levels e.g. soft corals, LPS, and SPS corals.

[Bacillariophyceae](#) ([Diatoms](#))

Type	Percent of eDNA	Family	Name
sq24985	1.507	Bacillariophyceae	Bacillariophyta sp.
sq105834	1.243	Bacillariophyceae	Craticula pseudocitrus
sq56	0.606	Bacillariophyceae	uncultured eukaryote
sq191948	0.062	Bacillariophyceae	Nitzschia cf.
sq25291	0.047	Bacillariophyceae	uncultured marine
sq192378	0.016	Bacillariophyceae	uncultured eukaryote
sq195080	0.016	Bacillariophyceae	uncultured marine
sq195081	0.016	Bacillariophyceae	uncultured eukaryote
sq195121	0.016	Bacillariophyceae	Pseudo-nitzschia pungens
sq195124	0.016	Bacillariophyceae	Bacillariophyta sp.

[Bivalvia](#) ([Molluscs](#))

Type	Percent of eDNA	Family	Name
sq181575	0.218	Mytiloida	Mytilus edulis

[Calcarea](#) ([Sponges](#))

Type	Percent of eDNA	Family	Name
sq11	57.622	Leucosolenida	Aphroceras sp.
sq42	0.932	Leucosolenida	Grantiopsis heroni
sq1124	0.575	Leucosolenida	Aphroceras sp.
sq39377	0.155	Leucosolenida	Aphroceras sp.
sq191643	0.078	Leucosolenida	Aphroceras sp.
sq192381	0.047	Leucosolenida	Aphroceras sp.
sq192382	0.047	Leucosolenida	Aphroceras sp.
sq192384	0.047	Clathrinida	Leucetta sp.

sq192386	0.047	Leucosolenida	Aphroceras sp.
sq192388	0.047	Leucosolenida	Aphroceras sp.
sq152092	0.031	Leucosolenida	Aphroceras sp.
sq193169	0.031	Leucosolenida	Aphroceras sp.
sq193174	0.031	Leucosolenida	Aphroceras sp.
sq193176	0.031	Leucosolenida	Aphroceras sp.
sq193178	0.031	Calcarea	Leuconia nivea
sq193180	0.031	Calcarea	Leuconia nivea
sq193184	0.031	Leucosolenida	Leucascandra caveolata
sq193185	0.031	Leucosolenida	Aphroceras sp.
sq193191	0.031	Calcarea	Leuconia nivea
sq193192	0.031	Leucosolenida	Aphroceras sp.
sq181736	0.016	Leucosolenida	Grantiopsis heroni
sq195074	0.016	Leucosolenida	Aphroceras sp.
sq195075	0.016	Leucosolenida	Aphroceras sp.
sq195082	0.016	Calcarea	Leuconia nivea
sq195084	0.016	Calcarea	Leuconia nivea
sq195112	0.016	Calcarea	Sycon calcaravis
sq195113	0.016	Leucosolenida	Leucandra nicolae
sq195114	0.016	Clathrinida	Leucetta sp.
sq195118	0.016	Leucosolenida	Leucosolenia sp.
sq195119	0.016	Leucosolenida	Grantiopsis heroni
sq195125	0.016	Leucosolenida	Aphroceras sp.
sq195127	0.016	Leucosolenida	Aphroceras sp.
sq195139	0.016	Leucosolenida	Aphroceras sp.

[Demospongiae](#) (Sponges)

Type	Percent of eDNA	Family	Name
sq181571	0.078	Clionaida	Spirastrella sp.

sq195102	0.016	Clionaida	Spirastrella sp.
sq195103	0.016	Clionaida	Spirastrella sp.
sq195104	0.016	Clionaida	Spirastrella sp.

[Diatomea](#) (Diatoms)

Type	Percent of eDNA	Family	Name
sq190649	0.186	Fragilariales	uncultured marine
sq193187	0.031	Fragilariales	uncultured stramenopile
sq195093	0.016	Fragilariales	uncultured stramenopile

[Dinophyceae](#) (Dinoflagellates)

Type	Percent of eDNA	Family	Name
sq175	1.632	Gymnodiniphycidae	Amphidinium sp.
sq66907	1.414	Gymnodiniphycidae	Amphidinium sp.
sq190209	0.218	Peridiniales	Protooperidinium crassipes
sq191637	0.078	Gonyaulacales	Ostreopsis cf.
sq193168	0.031	Gymnodiniphycidae	Amphidinium sp.
sq193190	0.031	Gymnodiniphycidae	Amphidinium sp.
sq193194	0.031	Gymnodiniphycidae	Amphidinium sp.
sq195128	0.016	Gymnodiniphycidae	Amphidinium sp.
sq195129	0.016	Gymnodiniphycidae	Amphidinium carterae
sq195130	0.016	Gymnodiniphycidae	Amphidinium sp.
sq195131	0.016	Gymnodiniphycidae	uncultured dinoflagellate
sq195132	0.016	Gymnodiniphycidae	Amphidinium carterae
sq195137	0.016	Gymnodiniphycidae	Amphidinium sp.

[Diplonemea](#) (Protists)

Type	Percent of eDNA	Family	Name
sq191045	0.124	Diplonemea	Diplonema ambulator

[Discosea](#) ([Amoebae](#)).

Type	Percent of eDNA	Family	Name
sq191399	0.093	Dactylopodida	Parvamoeba rugata
sq191644	0.078	Dactylopodida	Paramoeba eilhardi
sq191949	0.062	Vannellida	Vannella sp.
sq195138	0.016	Dactylopodida	Paramoeba eilhardi

[Dothideomycetes](#)

Type	Percent of eDNA	Family	Name
sq191640	0.078	Didymellaceae	Curvularia kusanoi
sq193181	0.031	Didymellaceae	Curvularia kusanoi
sq195101	0.016	Didymellaceae	Curvularia kusanoi
sq195115	0.016	Didymellaceae	Curvularia kusanoi

[Embryophyta](#) ([Land Plants](#)).

Type	Percent of eDNA	Family	Name
sq1173	0.093	Embryophyta	Hordeum vulgare
sq191946	0.062	Embryophyta	Triticum polonicum

[Entoprocta](#)

Type	Percent of eDNA	Family	Name
sq6347	1.01	Entoprocta	Loxosomella profundorum

[Euglenida](#)

Type	Percent of eDNA	Family	Name
sq190325	0.482	Heteronematina	Notosolenus urceolatus

[Intramacronucleata](#) ([Ciliates](#)).

Type	Percent of eDNA	Family	Name
sq980	20.855	Protohypotrichia	Kiitricha marina
sq218	0.591	Oligohymenophorea	Uronema marinum

sq5252	0.295	Licinophoria	Licinophora cf.
sq828	0.155	Oligohymenophorea	microbial mat
sq191046	0.124	Protohypotrichia	Kiitricha marina
sq191397	0.093	Protohypotrichia	Kiitricha marina
sq191398	0.093	Phyllopharyngea	Ephelota mammillata
sq1582	0.078	Colpodea	Aristerostoma sp.
sq153392	0.078	Protohypotrichia	Kiitricha marina
sq190419	0.078	Oligotrichia	uncultured eukaryote
sq191638	0.078	Protohypotrichia	Kiitricha marina
sq191639	0.078	Prostomatea	Tiarina fusa
sq192376	0.047	Protohypotrichia	Kiitricha marina
sq192379	0.047	Oligohymenophorea	Scuticociliatia SL-220
sq117	0.031	Hypotrichia	Trichototaxis marina
sq150279	0.031	Protohypotrichia	Kiitricha marina
sq193170	0.031	Oligotrichia	uncultured eukaryote
sq193173	0.031	Protohypotrichia	Kiitricha marina
sq18118	0.016	Protohypotrichia	Kiitricha marina
sq154031	0.016	Protohypotrichia	Kiitricha marina
sq195078	0.016	Oligohymenophorea	microbial mat
sq195086	0.016	Protohypotrichia	Kiitricha marina
sq195089	0.016	Protohypotrichia	Kiitricha marina
sq195090	0.016	Oligotrichia	uncultured eukaryote
sq195094	0.016	Prostomatea	Tiarina fusa
sq195096	0.016	Oligohymenophorea	Uronema marinum
sq195123	0.016	Protohypotrichia	Kiitricha marina
sq195134	0.016	Protohypotrichia	Kiitricha marina

[Maxillopoda](#) (Crustaceans)

Type	Percent of eDNA	Family	Name
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sq190420	0.295	Calanoida	uncultured eukaryote
sq190210	0.202	Cyclopoida	uncultured marine
sq190522	0.078	Harpacticoida	Tisbe sp.
sq192387	0.047	Calanoida	uncultured eukaryote
sq193179	0.031	Maxillopoda	Cyclopinella sp.
sq195097	0.016	Cyclopoida	uncultured marine

[Phaeophyceae](#) (Brown Algae)

Type	Percent of eDNA	Family	Name
sq1270	0.528	Ectocarpales	Halothrix ambigua
sq192377	0.047	Phaeophyceae	Lessonia variegata
sq193167	0.031	Ectocarpales	Scytosiphon lomentaria
sq193189	0.031	Ectocarpales	Halothrix ambigua
sq195079	0.016	Ectocarpales	Halothrix ambigua

[Picozoa](#)

Type	Percent of eDNA	Family	Name
sq195092	0.016	Picozoa	uncultured rhodophyte

[Polychaeta](#) (Worms)

Type	Percent of eDNA	Family	Name
sq193166	0.031	Spionida	Psammodrillus curinigallettii

[Pycnogonida](#)

Type	Percent of eDNA	Family	Name
sq195076	0.016	Pantopoda	Oropallene minor

[Sordariomycetes](#) (Fungi)

Type	Percent of eDNA	Family	Name
sq192385	0.047	Incertae_Sedis	Acremonium potronii

[Ulvophyceae](#) (Green Algae)

Type	Percent of eDNA	Family	Name
sq1262	0.761	Ulvophyceae	Ulvella viridis
sq102	0.295	Ulvophyceae	Pseudulvella consociata
sq1033	0.093	Ulvophyceae	Chaetomorpha crassa
sq195126	0.016	Ulvophyceae	Ulvella viridis

[Wallemiomycetes](#) (Fungi)

Type	Percent of eDNA	Family	Name
sq1122	0.171	Incertae_Sedis	Wallemia sebi

DNA analysis conducted by [AquaBiomics LLC](#).