



# AquaBiomics tankDNA Test Report



## About this report

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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. (You can read more about this method [here](#)).

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	<a href="#">1000804</a>
Sample Name	unknown
Tank Name	unknown
Sample Date	unknown

## Parasites

Parasite	Disease	Your level (Percentile)	Prevalence
<a href="#">Cryptocaryon irritans</a>	<a href="#">Marine ich</a>	0.03% (13)	9.82

### 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 (0.7%) - this is normal and does not suggest a problem.

► View all Dinoflagellates

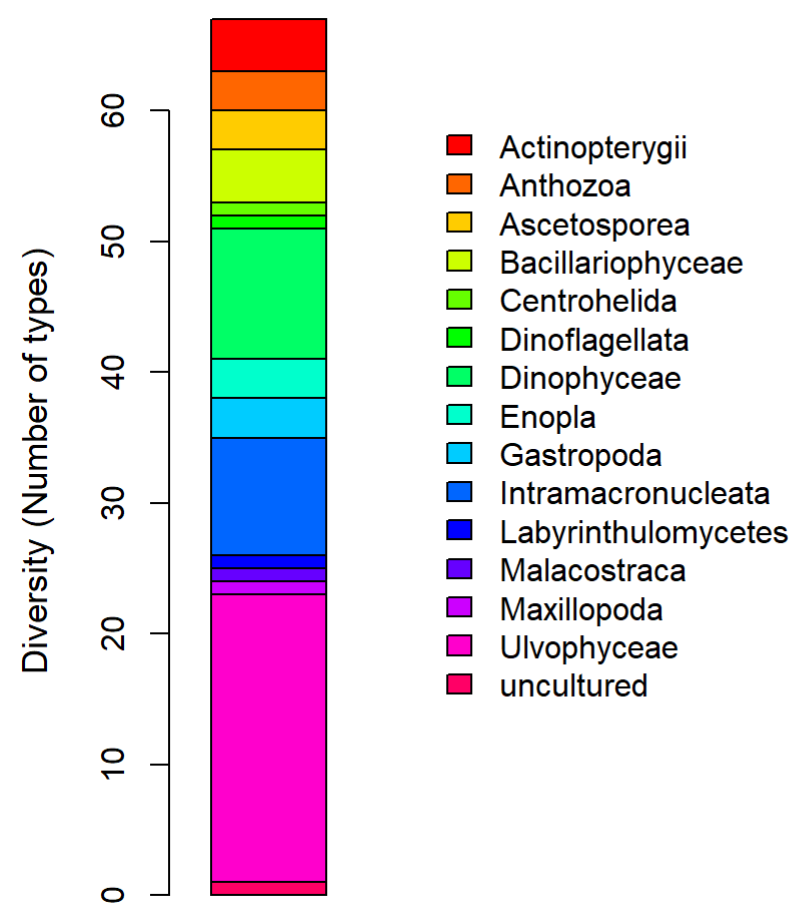
# Diatoms

This sample contained low levels of DNA from diatoms (0.3%) - this is normal and does not suggest a problem.

► View all Diatoms

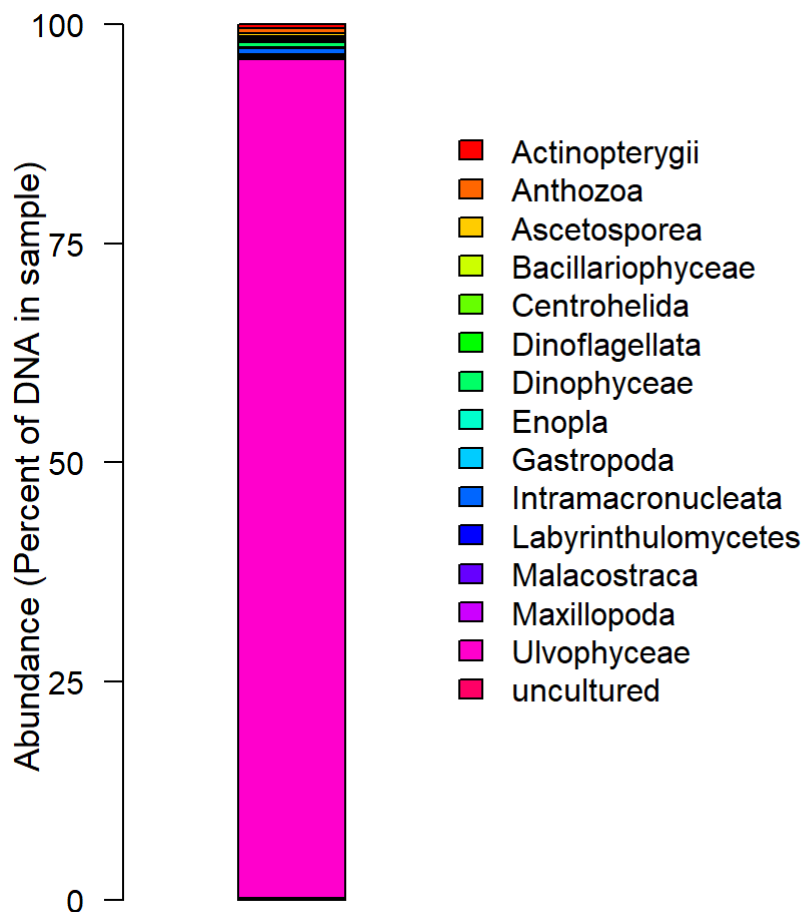
## Eukaryotic Biodiversity

Diversity (Number of different types)	82
Number of Phyla	13
Number of Classes	15



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

### [Actinopterygii](#) (Fish)

Type	Percent of eDNA	Family	Name
sq1	0.380	<a href="#">Actinopterygii</a>	<a href="#">Maccullochella peelii</a>
sq127794	0.059	<a href="#">Actinopterygii</a>	<a href="#">Lates calcarifer</a>
sq117597	0.042	<a href="#">Actinopterygii</a>	<a href="#">Neolamprologus brichardi</a>
sq128422	0.017	<a href="#">Actinopterygii</a>	<a href="#">Neolamprologus brichardi</a>

*Note:*

The marker used here is not useful for distinguishing between fish species, so this entire category should be interpreted simply as fish DNA.

### [Anthozoa](#) (Corals, Anemones)

Type	Percent of eDNA	Family	Name
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sq24565	0.271	<a href="#">Scleractinia</a>	<a href="#">Astrangia poculata</a>
sq46	0.211	<a href="#">Scleractinia</a>	Micromussa sp.
sq128836	0.008	<a href="#">Scleractinia</a>	Micromussa sp.

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.

### [Ascetosporea](#)

Type	Percent of eDNA	Family	Name
sq127680	0.262	<a href="#">Ascetosporea</a>	Haplosporidian parasite
sq5409	0.110	<a href="#">Ascetosporea</a>	haplosporidian parasite
sq128414	0.017	<a href="#">Ascetosporea</a>	haplosporidian parasite

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

Type	Percent of eDNA	Family	Name
sq127690	0.203	<a href="#">Bacillariophyceae</a>	uncultured marine
sq128086	0.034	<a href="#">Bacillariophyceae</a>	Sellaphora laevissima
sq128420	0.017	<a href="#">Bacillariophyceae</a>	Frustulia cf.
sq128841	0.008	<a href="#">Bacillariophyceae</a>	uncultured eukaryote

### [Centrohelida](#)

Type	Percent of eDNA	Family	Name
sq3673	0.203	M1-18D08	uncultured marine

### [Dinoflagellata](#) ([Dinoflagellates](#))

Type	Percent of eDNA	Family	Name
sq8	0.22	<a href="#">Dinoflagellata</a>	uncultured eukaryote

### [Dinophyceae](#) ([Dinoflagellates](#))

Type	Percent of eDNA	Family	Name
sq979	0.254	Gymnodiniphycidae	Amphidinium sp.

sq54447	0.076	<a href="#">Gonyaulacales</a>	uncultured eukaryote
sq987	0.068	<a href="#">Gonyaulacales</a>	Ostreopsis cf.
sq128087	0.034	Thoracosphaeraceae	Cryptoperidiniopsis brodyi
sq66587	0.025	Gymnodiniphycidae	Amphidinium sp.
sq96057	0.017	Thoracosphaeraceae	uncultured marine
sq38915	0.008	<a href="#">Kareniaceae</a>	uncultured eukaryote
sq128840	0.008	Gymnodiniphycidae	Amphidinium sp.
sq128843	0.008	Gymnodiniphycidae	Amphidinium sp.
sq128845	0.008	<a href="#">Kareniaceae</a>	uncultured eukaryote

#### [Enopla](#) ([Ribbon worms](#))

Type	Percent of eDNA	Family	Name
sq118131	0.059	<a href="#">Monostilifera</a>	Tetrastemmatidae sp.
sq128423	0.017	<a href="#">Monostilifera</a>	Hoplonemertea sp.
sq128846	0.008	<a href="#">Monostilifera</a>	Tetrastemma sp.

#### [Gastropoda](#) ([Snails](#))

Type	Percent of eDNA	Family	Name
sq538	0.059	<a href="#">Vetigastropoda</a>	<a href="#">Turbo cornutus</a>
sq127987	0.042	<a href="#">Vetigastropoda</a>	<a href="#">Turbo cornutus</a>
sq18174	0.008	<a href="#">Vetigastropoda</a>	Fluxinella sp.

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

Type	Percent of eDNA	Family	Name
sq34400	0.457	<a href="#">Hypotrichia</a>	Urorychia transfuga
sq80	0.110	<a href="#">Hypotrichia</a>	Holosticha heterofoissneri
sq127716	0.034	<a href="#">Hypotrichia</a>	Urorychia transfuga
sq122645	0.025	<a href="#">Prostomatea</a>	<a href="#">Cryptocaryon irritans</a>
sq128224	0.025	<a href="#">Oligohymenophorea</a>	Cothurnia salina
sq13591	0.008	<a href="#">Hypotrichia</a>	Urorychia transfuga

sq124814	0.008	<a href="#">Hypotruchia</a>	Uronychia sinica
sq128398	0.008	<a href="#">Hypotruchia</a>	Uronychia sinica
sq128842	0.008	<a href="#">Hypotruchia</a>	Uronychia transfuga

#### [Labyrinthulomycetes](#) (Fungus-like Protists)

Type	Percent of eDNA	Family	Name
sq1233	0.152	Thraustochytriaceae	uncultured eukaryote

#### [Malacostraca](#) (Crustaceans)

Type	Percent of eDNA	Family	Name
sq629	0.101	<a href="#">Malacostraca</a>	<a href="#">Neomysis integer</a>

#### [Maxillopoda](#) (Crustaceans)

Type	Percent of eDNA	Family	Name
sq7056	0.279	<a href="#">Harpacticoida</a>	Paramenophia sp.

#### [Ulvophyceae](#) (Green Algae)

Type	Percent of eDNA	Family	Name
sq1013	93.506	<a href="#">Ulvophyceae</a>	Phaeophila dendroides
sq127694	0.194	<a href="#">Ulvophyceae</a>	Ulvella repens
sq127702	0.169	<a href="#">Ulvophyceae</a>	Phaeophila dendroides
sq127709	0.152	<a href="#">Ulvophyceae</a>	Phaeophila dendroides
sq127745	0.110	<a href="#">Ulvophyceae</a>	Phaeophila dendroides
sq127746	0.110	<a href="#">Ulvophyceae</a>	Phaeophila dendroides
sq127795	0.085	<a href="#">Ulvophyceae</a>	Phaeophila dendroides
sq127796	0.085	<a href="#">Ulvophyceae</a>	Phaeophila dendroides
sq127819	0.076	<a href="#">Ulvophyceae</a>	Phaeophila dendroides
sq127848	0.068	<a href="#">Ulvophyceae</a>	Phaeophila dendroides
sq127850	0.068	<a href="#">Ulvophyceae</a>	Phaeophila dendroides
sq127879	0.059	<a href="#">Ulvophyceae</a>	Phaeophila dendroides
sq127915	0.051	<a href="#">Ulvophyceae</a>	Phaeophila dendroides

sq127916	0.051	<a href="#">Ulvophyceae</a>	Phaeophila dendroides
sq127984	0.042	<a href="#">Ulvophyceae</a>	Phaeophila dendroides
sq127986	0.042	<a href="#">Ulvophyceae</a>	Bolbocoleon piliferum
sq127988	0.042	<a href="#">Ulvophyceae</a>	Phaeophila dendroides
sq128223	0.025	<a href="#">Ulvophyceae</a>	Phaeophila dendroides
sq128416	0.017	<a href="#">Ulvophyceae</a>	Bolbocoleon piliferum
sq128417	0.017	<a href="#">Ulvophyceae</a>	Phaeophila dendroides
sq128418	0.017	<a href="#">Ulvophyceae</a>	Phaeophila dendroides
sq128838	0.008	<a href="#">Ulvophyceae</a>	Phaeophila dendroides

#### uncultured

Type	Percent of eDNA	Family	Name
sq2446	0.228	uncultured	uncultured alveolate

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