Aquarium Microbiome Analysis Report

About this report

This report describes the results from DNA analysis of the following sample:

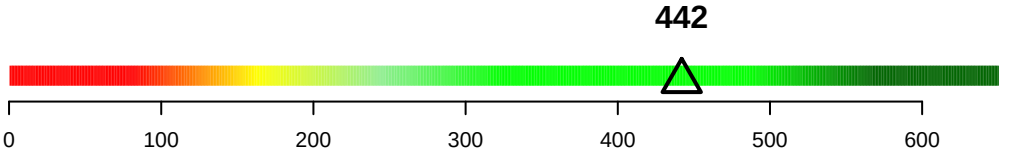
Sample ID	1000075
Sample Name	BacT
Tank Name	120 Gallon
Sample Date	2019−10−24 09:25 AM
Report Date	11/27/2019 11:31

These data provide detailed information on the community of microbes living in your aquarium. Each type of microbe in your sample was identified by comparing DNA sequences from your sample with a database of DNA sequences from known types. The relative abundance of each sequence can be used to compare the relative abundance of each type across samples.

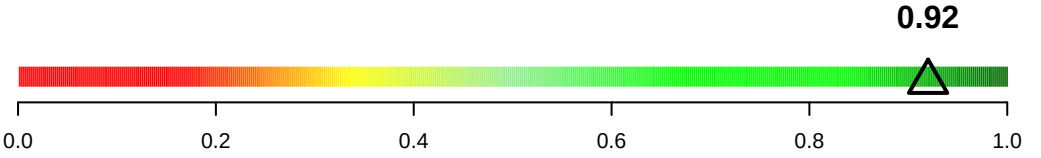
Aquarium Microbiome Analysis Report

Part 1: Diversity and balance

Number of Microbial Types



Diversity Score (Percentile)



Your tank's microbiome is much lower than the typical saltwater aquarium's.	The diversity of your tank's microbiome is at the lower end of the typical range.	Your tank has a diverse microbial community, typical for mature reef tanks.
Consider adding biodiversity from live rock or other sources of live microbes.	*Continue to monitor.*	*Celebrate your success!*

Aquarium Microbiome Analysis Report

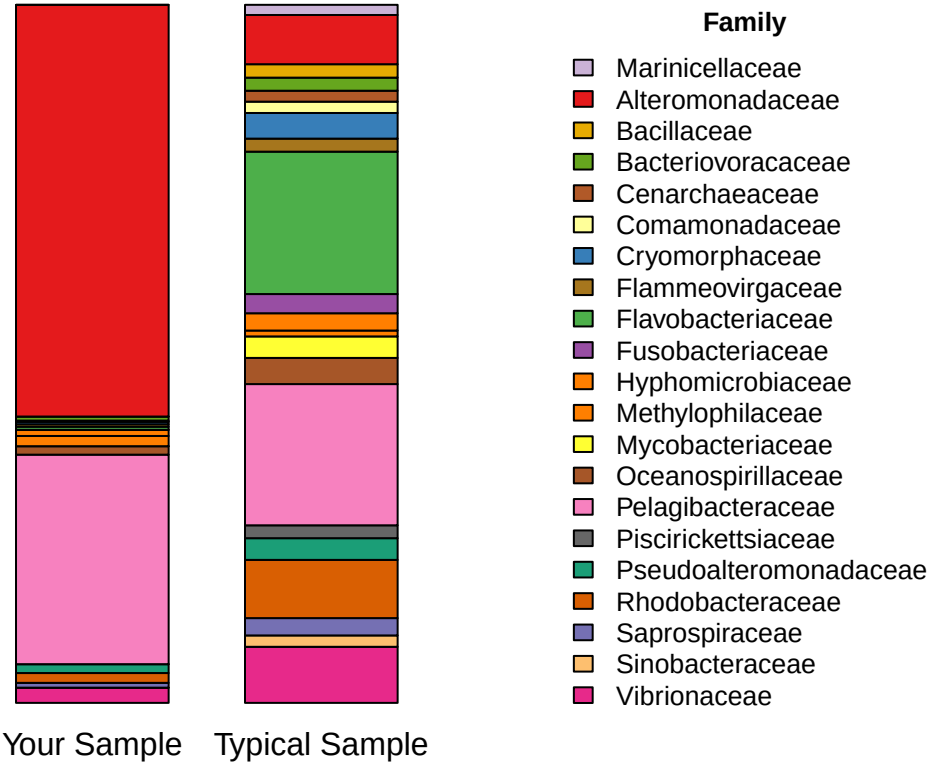
Balance Score (Correlation with Typical Abundance)



The balance between microbial types in your tank is very different than typical reef tanks.	Differences between your tank's microbial profile and the typical tank are greater than the similarities.	The balance between microbial types in your tank is very similar to the typical mature reef tank.
Considering adjusting your tank's microbiome by changing the amounts and types of nutrients available.	*Continue to monitor.*	*Enjoy your healthy ecosystem!*

Aquarium Microbiome Analysis Report

Part 2: Abundance of each family in your sample



Bars indicate the relative abundance of all microbial families accounting for at least 1% of the community either in your sample or the typical reef tank.

Aquarium Microbiome Analysis Report

Part 3: Microbial groups of interest

Ammonia−oxidizing groups

Group	Your.Frequency	Typical.Range
Ammonia−oxidizing community, total	0.00025	0.018 − 0.0638
Nitrosomonadaceae	0	1e−04−0.0011
Nitrosococcus	0	0−1e−04
Cenarchaeaceae	0.00025	0.0175−0.063

Aquarium Microbiome Analysis Report

Nitrite−oxidizing groups

Group	Your.Frequency	Typical.Range
Nitrite−oxidizing community, total	0	0.0011 − 0.0042
Nitrobacter	0	0−0
Nitrospinaceae	0	0−1e−04
Nitrococcus	0	0−0
Nitrospiraceae	0	0.0011−0.0042
Gallionellaceae	0	0−0

Aquarium Microbiome Analysis Report

Cyanobacteria, by family

Group	Your.Frequency	Typical.Range
Cyanobacteria, total	0.00029	0.001 – 0.0042
Acaryochloridaceae	0	1e−04–6e−04
Phormidiaceae	0	0–1e−04
Pseudanabaenaceae	0	0–3e−04
Spirulinaceae	0	0–0
Synechococcaceae	0	0–7e−04
Ulvophyceae	0	3e−04–0.0039
Xenococcaceae	0.00029	0–6e−04

Aquarium Microbiome Analysis Report

Fish pathogens

Group	Your.Frequency	Typical.Range
Fish pathogens, total	0	0 – 6e−04
Eubacterium tarantellae	0	0–0
Lactococcus garvieae	0	0–0
Enterococcus seriolicida	0	0–0
Streptococcus parauberis	0	0–0
Streptococcus iniae	0	0–0
Mycobacterium chelonei	0	0–0
Mycobacterium fortuitum,	0	0–0
Mycobacterium marinum	0	0–0
Mycobacterium neoaurum	0	0–0
Nocardia asteroides	0	0–0
Nocardia salmonicida	0	0–0
Nocardia seriolae	0	0–0
Renibacterium salmoninarum	0	0–0
Aeromonas jandaei	0	0–0
Aeromonas salmonicida	0	0–0
Serratia liquefaciens	0	0–0
Chryseobacterium balustinum	0	0–0

Aquarium Microbiome Analysis Report

Fish pathogens (continued)

Group	Your.Frequency	Typical.Range
Chryseobacterium scophthalmum	0	0–0
Tenacibaculum maritimus	0	0–0
Tenacibaculum ovolyticus	0	0–0
Pasteurella skyensis	0	0–0
Pseudomonas anguilliseptica	0	0–0
Moritella marina	0	0–0
Moritella viscosa	0	0–0
Photobacterium damselae	0	0–6e−04
Shewanella putrefaciens	0	0–0
Vibrio alginolyticus	0	0–0
Vibrio cholerae	0	0–0
Vibrio fischeri	0	0–0
Vibrio furnissii	0	0–0
Vibrio harveyi	0	0–0
Vibrio carchariae	0	0–0
Vibrio trachuri	0	0–0
Vibrio ichthyoenteri	0	0–0
Vibrio logei	0	0–0

Aquarium Microbiome Analysis Report

Fish pathogens (continued)

Group	Your.Frequency	Typical.Range
Vibrio ordalii	0	0–0
Vibrio pelagius	0	0–0
Vibrio salmonicida	0	0–0
Vibrio splendidus	0	0–0
Halomonas cupida	0	0–0
Piscirickettsia salmonis	0	0–0

Aquarium Microbiome Analysis Report

Coral pathogens

Group	Your.Frequency	Typical.Range
Coral pathogens, total	0	0 – 0
Vibrio shiloi	0	0–0
Vibrio coralliilyticus	0	0–0
Vibrio harveyi	0	0–0
Aurantimonas coralicida	0	0–0
Vibrio rotiferianus	0	0–0
Vibrio alginolyticus	0	0–0
Vibrio proteolyticus	0	0–0
Vibrio charcharvina	0	0–0
Serratia marscens	0	0–0
Aquarickettsia rohweri	0	0–0