



Aquarium Microbiome Analysis Report

About this report

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

Sample ID	farm_11_8
Sample Name	Farm Tank 11-8-19
Tank Name	Farm Tank
Sample Date	2019-11-08 08:00 AM
Report Date	11/30/2019 08:06

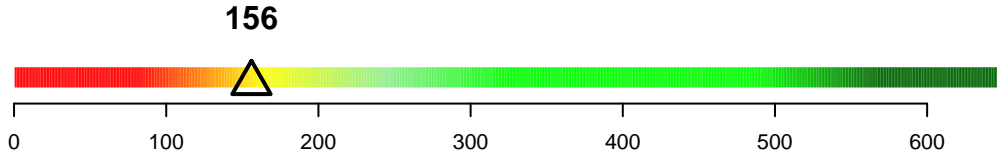
These data provide detailed information on the community of microbes living in your aquarium. Each type of microbe in your sample was identified by comparing DNA sequences from your sample with a database of DNA sequences from known types. The relative abundance of each sequence can be used to compare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



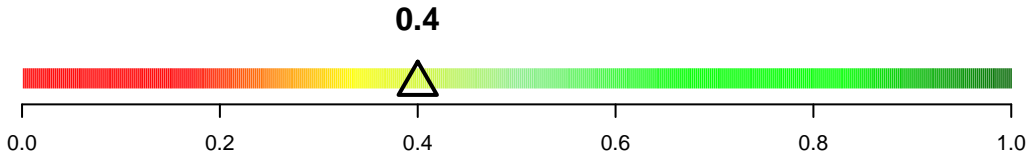
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Part 1: Diversity and balance

Number of Microbial Types



Diversity Score (Percentile)



Your tank's microbiome is much lower than the typical saltwater aquarium's.

Consider adding biodiversity from live rock or other sources of live microbes.



The diversity of your tank's microbiome is at the lower end of the typical range.

Continue to monitor.



Your tank has a diverse microbial community, typical for mature reef tanks.

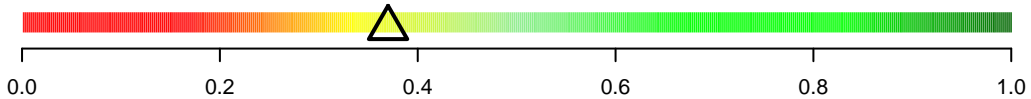
Celebrate your success!



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Balance Score (Correlation with Typical Abundance)

0.37



The balance between microbial types in your tank is very different than typical reef tanks.

Considering adjusting your tank's microbiome by changing the amounts and types of nutrients available.



Differences between your tank's microbial profile and the typical tank are greater than the similarities.

Continue to monitor.



The balance between microbial types in your tank is very similar to the typical mature reef tank.

Enjoy your healthy ecosystem!

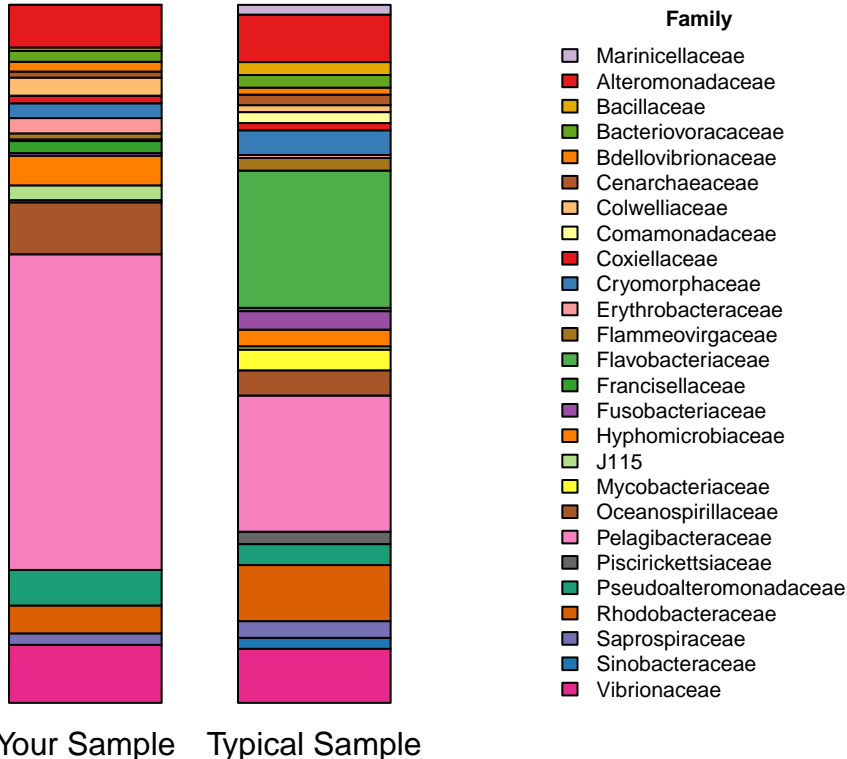
DNA analysis conducted by AquaBiomics LLC.

<https://aquabiotics.com/>



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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.



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Part 3: Microbial groups of interest

Ammonia-oxidizing groups

Group	Your.Frequency	Typical.Range
Ammonia-oxidizing community, total	0.00548	0.018 – 0.0638
Nitrosomonadaceae	0	1e-04–0.0011
Nitrosococcus	0	0–1e-04
Cenarchaeaceae	0.00548	0.0175–0.063



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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



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Cyanobacteria, by family

Group	Your.Frequency	Typical.Range
Cyanobacteria, total	0	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	0–6e-04



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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 chelonae	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

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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 damsela	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 ichthyenteri	0	0–0
Vibrio logei	0	0–0

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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



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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

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