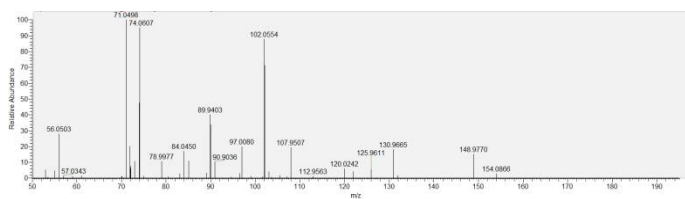


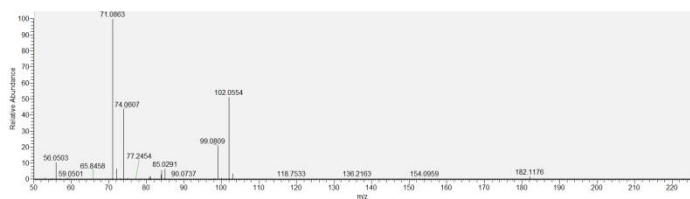
# Supplementary material

## Figure S1 : Fragmentation MS/MS spectra of AHL standards

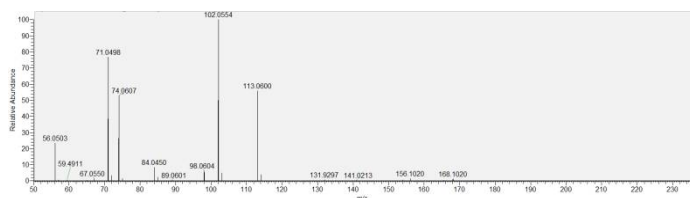
C4-HSL



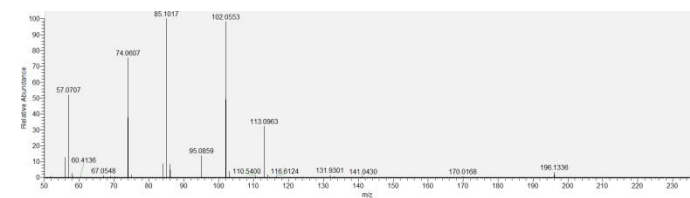
C6-HSL



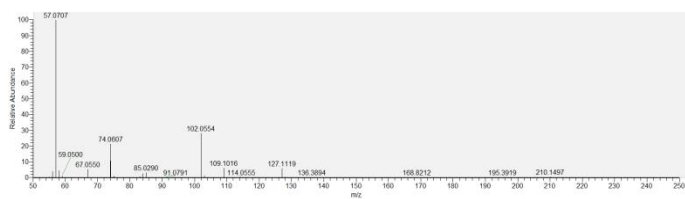
OXO-C6-HSL



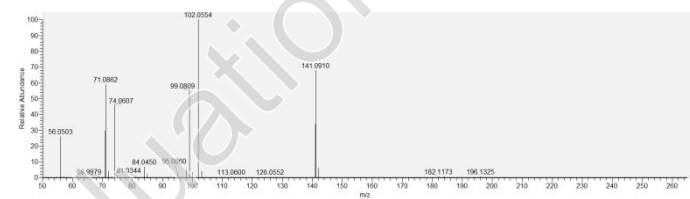
C7-HSL



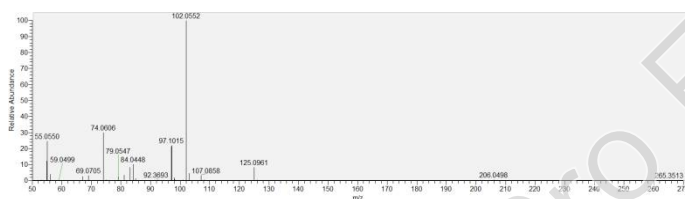
C8-HSL



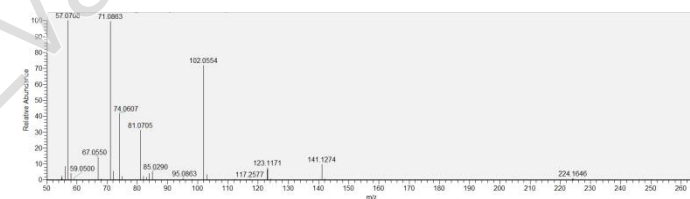
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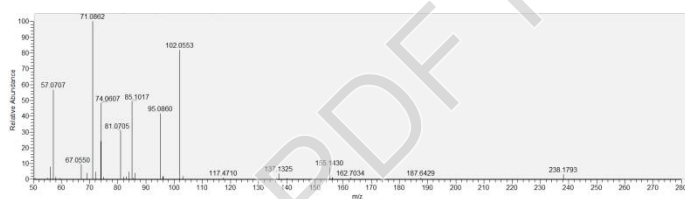
OH-C8-HSL



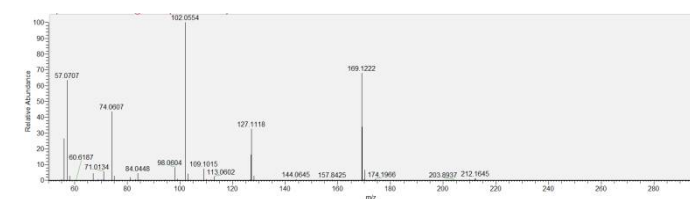
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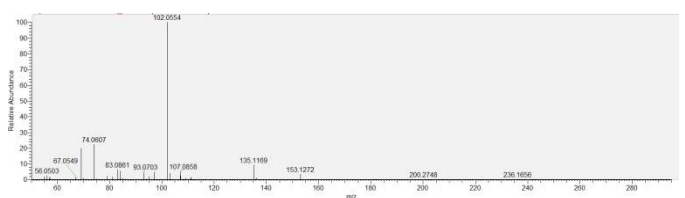
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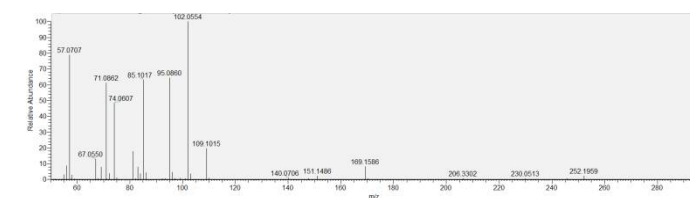
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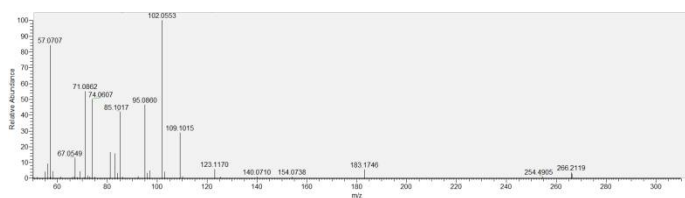
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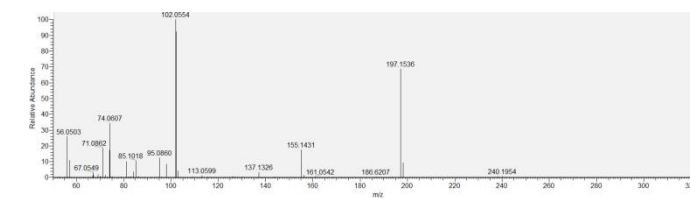
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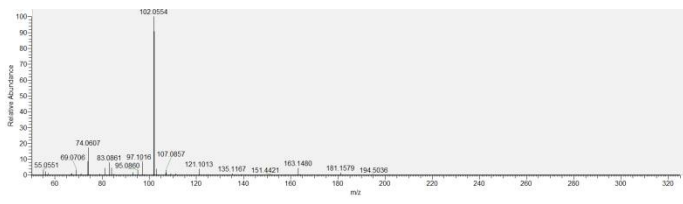
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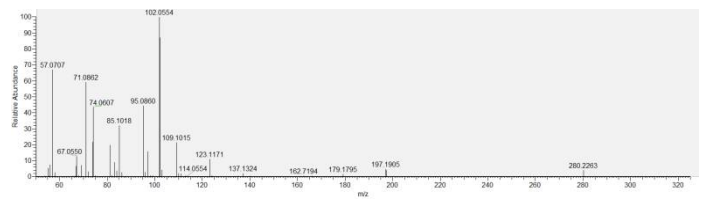
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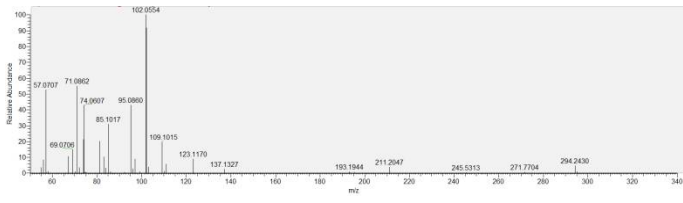
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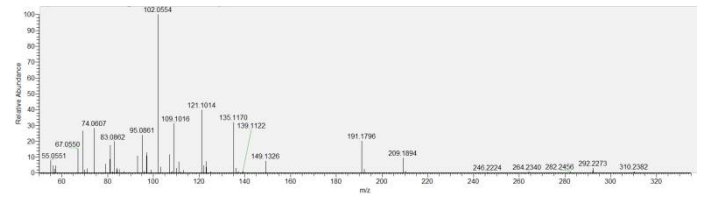
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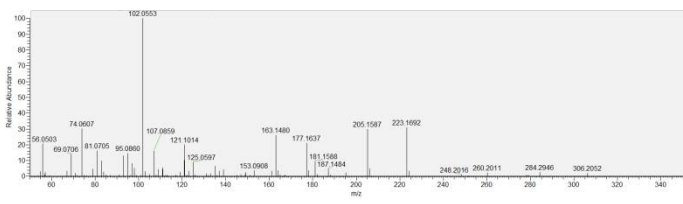
C14-HSL



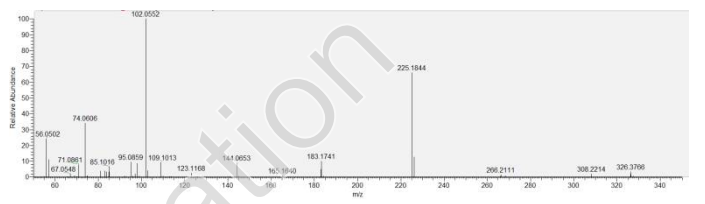
C14:1-HSL



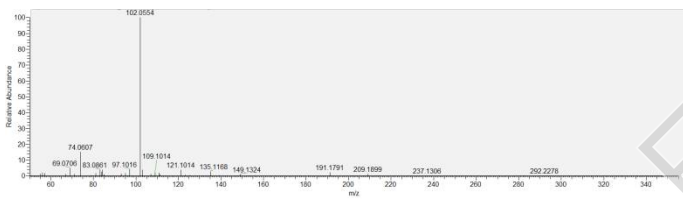
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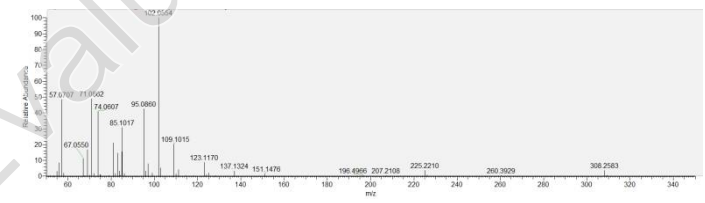
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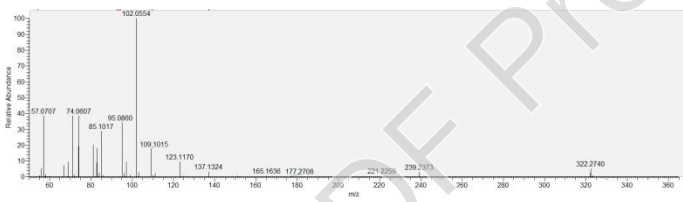
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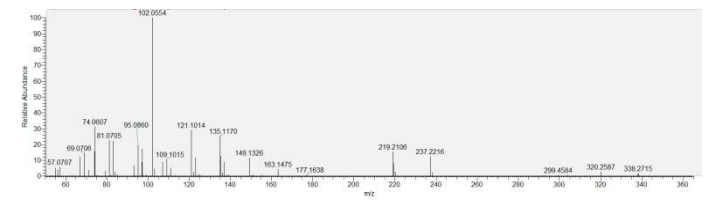
C15-HSL



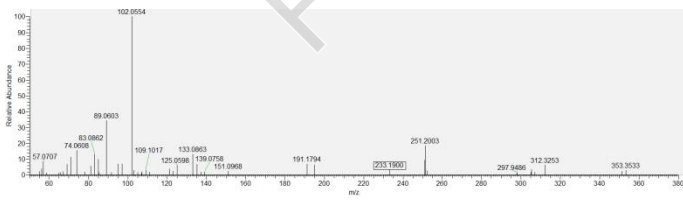
C16-HSL



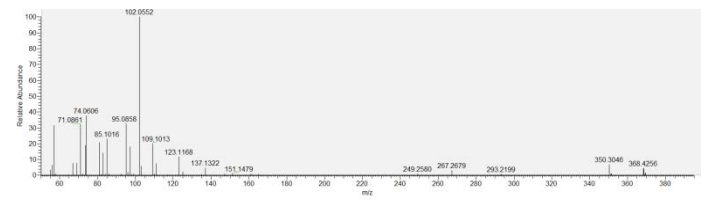
C16:1-HSL



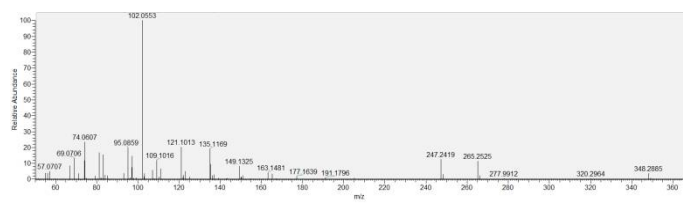
OXO-C16:1-HSL



C18-HSL



C18:1-HSL





**Table S1 : List of the 87 tested strains with their origin, their identification by 16S rRNA gene sequence and their GenBank accession numbers. SOLA, Banyuls Bay, Barcelona Bay, Leucate and Bages-Sigean Lagoons are located in the North-Western Mediterranean sea.**

BBC	Closest relative species	% of similarity	Origin	Accession number
62	<i>Vibrio campbellii</i>	99	SW, 3m, SOLA station	KY697620
66	<i>Vibrio splendidus</i>	99	SW, 3m, SOLA station	AM990841
67	<i>Vibrio splendidus</i>	99	SW, 3m, SOLA station	AM990842
165	<i>Vibrio splendidus</i>	99	SW, surface, Barcelona Bay, Spain	AY576700
239	<i>Vibrio splendidus</i>	99	SW, 3m, SOLA station	AY612761
416	<i>Vibrio campbellii</i>	99	SW, surface, Guanabara Bay, Brazil	AM990683
490	<i>Vibrio ichthyenteri</i>	99	SW, 3m, SOLA station	KY697621
491	<i>Vibrio ichthyenteri</i>	99	SW, 3m, SOLA station	KY697622
493	<i>Vibrio brasiliensis</i>	99	SW, 3m, SOLA station	KY697623
494	<i>Vibrio brasiliensis</i>	99	SW, 3m, SOLA station	KY697624
495	<i>Vibrio lentus</i>	100	SW, 3m, SOLA station	KY697625
496	<i>Vibrio neptunius</i>	99	SW, 3m, SOLA station	KY697626
498	<i>Vibrio splendidus</i>	99	<i>Petrosia ficiformis</i> , Banyuls Bay	AM990723
500	<i>Vibrio splendidus</i>	99	<i>Petrosia ficiformis</i> , Banyuls Bay	AM990725
502	<i>Vibrio pomeroyi</i>	99	<i>Petrosia ficiformis</i> , Banyuls Bay	AM990727
503	<i>Vibrio gigantis</i>	99	<i>Petrosia ficiformis</i> , Banyuls Bay	AM990728
526	<i>Vibrio tasmaniensis</i>	99	<i>Petrosia ficiformis</i> , Banyuls Bay	AM990750
527	<i>Vibrio splendidus</i>	99	<i>Petrosia ficiformis</i> , Banyuls Bay	AM990751
528	<i>Vibrio gallaecicus</i>	100	<i>Petrosia ficiformis</i> , Banyuls Bay	AM990752
529	<i>Vibrio cortegadensis</i>	100	<i>Petrosia ficiformis</i> , Banyuls Bay	AM990753
530	<i>Vibrio gigantis</i>	99	<i>Petrosia ficiformis</i> , Banyuls Bay	AM990754
546	<i>Vibrio natriegens</i>	99	SW, water column, Po Delta, Italy	KY697627
558	<i>Vibrio harveyi</i>	99	SW, water column, Po Delta, Italy	KY697628
576	<i>Vibrio harveyi</i>	100	SW, water column, Po Delta, Italy	KY697629
579	<i>Vibrio harveyi</i>	100	SW, water column, Po Delta, Italy	KY697630
583	<i>Vibrio chagasii</i>	100	SW, water column, Po Delta, Italy	KY697631
586	<i>Vibrio chagasii</i>	100	SW, water column, Po Delta, Italy	KY697632
605	<i>Vibrio harveyi</i>	100	SW, water column, Po Delta, Italy	KY697633
615	<i>Vibrio harveyi</i>	100	SW, water column, Po Delta, Italy	KY697634
620	<i>Vibrio tubiashi</i>	99	SW, water column, Po Delta, Italy	KY697635
626	<i>Vibrio harveyi</i>	100	SW, water column, Po Delta, Italy	KY697636
640	<i>Vibrio chagasii</i>	100	SW, water column, Po Delta, Italy	KY697637
850	<i>Vibrio lentus</i>	99	SW, surface, Bages-Sigean Lagoon	KY697638
851	<i>Vibrio lentus</i>	99	SW, surface, Bages-Sigean Lagoon	KY697639
852	<i>Vibrio splendidus</i>	99	SW, surface, Bages-Sigean Lagoon	KY697640
853	<i>Vibrio gigantis</i>	99	SW, surface, Bages-Sigean Lagoon	KY697641
1015	<i>Vibrio ordalii</i>	100	SW, surface, Bages-Sigean Lagoon	KY697642
1026	<i>Vibrio metschnikovii</i>	100	Dziani Dzaha halo alkali crater lake, Mayotte	KX818008
1055	<i>Vibrio metschnikovii</i>	100	Dziani Dzaha halo alkali crater lake, Mayotte	KX818036
1143	<i>Vibrio owensii</i>	99	SW, surface, Marsa alam (Red sea)	KY697643
1169	<i>Vibrio owensii</i>	100	SW, surface, Marsa alam (Red sea)	KY697644
1210	<i>Vibrio rumoiensis</i>	99	SW, surface, Canet Lagoon	KY697645
1211	<i>Vibrio rumoiensis</i>	99	SW, Surface, Canet Lagoon	KY697646
1228	<i>Vibrio scopthalmi</i>	98	Diseased <i>Paracentrotus lividus</i> , Banyuls Bay	KY697647
1230	<i>Vibrio gigantis</i>	100	Healthy <i>Paracentrotus lividus</i> , Banyuls Bay	KY697648

1231	<i>Vibrio tubiashi</i>	99	Healthy <i>Paracentrotus lividus</i> , Banyuls Bay	KY697649
1232	<i>Vibrio gigantis</i>	100	Healthy <i>Paracentrotus lividus</i> , Banyuls Bay	KY697650
1233	<i>Vibrio gigantis</i>	100	Healthy <i>Paracentrotus lividus</i> , Banyuls Bay	KY697651
1237	<i>Vibrio scophtalmi</i>	98	Diseased <i>Paracentrotus lividus</i> , Banyuls Bay	KY697652
1238	<i>Vibrio scophtalmi</i>	98	Diseased <i>Paracentrotus lividus</i> , Banyuls Bay	KY697653
1955	<i>Vibrio owensii</i>	99	<i>Ulva sp.</i> , Banyuls Bay	KY697654
1958	<i>Vibrio breoganii</i>	99	<i>Ulva sp.</i> , Banyuls Bay	KY697655
1962	<i>Vibrio pomeroyi</i>	100	SW, Banyuls Bay	KY697656
1971	<i>Vibrio pectenecida</i>	99	SW, Banyuls Bay	KY697657
1972	<i>Vibrio gigantis</i>	100	SW, Banyuls Bay	KY697658
1973	<i>Vibrio gigantis</i>	100	SW, Banyuls Bay	KY697659
1974	<i>Vibrio cortegadensis</i>	99	SW, Banyuls Bay	KY697660
1980	<i>Vibrio gigantis</i>	100	<i>Ulva sp.</i> , Banyuls Bay	KY697661
1982	<i>Vibrio gigantis</i>	100	<i>Ulva sp.</i> , Banyuls Bay	KY697662
1989	<i>Vibrio gigantis</i>	100	<i>Ulva sp.</i> , Banyuls Bay	KY697663
2045	<i>Vibrio gigantis</i>	99	<i>Peyssonnelia sp.</i> , Banyuls Bay	KY697664
2159	<i>Vibrio tubiashi</i>	99	<i>Posidonia oceanica</i> , Banyuls Bay	KY697665
2190	<i>Vibrio tubiashi</i>	99	<i>Posidonia oceanica</i> , Banyuls Bay	KY697666
2197	<i>Vibrio tasmaniensis</i> LGP32		CIP 107715, Diseased oyster <i>C. gigas</i>	NC_011753
2269	<i>Vibrio hemicentroti</i>	99	SW, 24m, SOLA station	KY697667
2311	<i>Vibrio hemicentroti</i>	99	<i>Salpa sp.</i> , Banyuls Bay	KY697668
2312	<i>Vibrio gigantis</i>	100	<i>Salpa sp.</i> , Banyuls Bay	KY697669
2313	<i>Vibrio atlanticus</i>	99	<i>Salpa sp.</i> , Banyuls Bay	KY697670
2315	<i>Vibrio gallaecicus</i>	99	<i>Salpa sp.</i> , Banyuls Bay	KY697671
2319	<i>Vibrio gallaecicus</i>	99	<i>Salpa sp.</i> , Banyuls Bay	KY697672
2327	<i>Vibrio gallaecicus</i>	99	<i>Salpa sp.</i> , Banyuls Bay	KY697673
2338	<i>Vibrio maritimus</i>	99	<i>Rhizostoma pulmo</i> , Leucate Lagoon	KY697674
2339	<i>Vibrio shilonii</i>	99	<i>Rhizostoma pulmo</i> , Leucate Lagoon	KY697675
2347	<i>Vibrio sinaloensis</i>	99	<i>Corticium candelabrum</i> , Banyuls Bay	KY697676
2351	<i>Vibrio shilonii</i>	99	<i>Corticium candelabrum</i> , Banyuls Bay	KY697677
2353	<i>Vibrio chagasii</i>	100	<i>Corticium candelabrum</i> , Banyuls Bay	KY697678
2357	<i>Vibrio gigantis</i>	100	<i>Corticium candelabrum</i> , Banyuls Bay	KY697679
2361	<i>Vibrio scophtalmi</i>	99	<i>Corticium candelabrum</i> , Banyuls Bay	KY697680
2363	<i>Vibrio shilonii</i>	99	<i>Corticium candelabrum</i> , Banyuls Bay	KY697681
2365	<i>Vibrio scophtalmi</i>	99	<i>Corticium candelabrum</i> , Banyuls Bay	KY697682
2366	<i>Vibrio harveyi</i>	99	<i>Corticium candelabrum</i> , Banyuls Bay	KY697683
2370	<i>Vibrio scophtalmi</i>	99	<i>Corticium candelabrum</i> , Banyuls Bay	KY697684
2372	<i>Vibrio gigantis</i>	100	<i>Corticium candelabrum</i> , Banyuls Bay	KY697685
2412	<i>Vibrio gigantis</i>	100	<i>Corticium candelabrum</i> , Banyuls Bay	KY697686
2413	<i>Vibrio scophtalmi</i>	99	<i>Corticium candelabrum</i> , Banyuls Bay	KY697687
2415	<i>Vibrio campbellii</i>	100	<i>Corticium candelabrum</i> , Banyuls Bay	KY697688
2428	<i>Vibrio mytili</i>	99	<i>Corticium candelabrum</i> , Banyuls Bay	KY697689