

## Taxonomy Browser

For MicroAQUA, probes have been designed for taxonomic groups like class level, clade level, genus and species level. The hierarchical probes make it easier to analyze environmental samples. For the species level probe to be present, the entire taxonomic hierarchy above the species probe has to be present. If the taxonomic hierarchy shows no signal, then the signal from the species probe can be considered to be a false positive.

To assign probes, saved in database, a "Taxonomy browser" is implemented on the MicroAqua internal website.

The following instruction will explain how to make use of the taxonomy browser tool :

1. To access the browser, click on the edit button, the last column of the grid, of individual row/probe.

Internal site External site Reports

Sampling site Sampling Filter sample Nucleic acid Oligo sequence Microarray experiments

Oligo Sequence File Upload

### Oligo sequences

New oligo sequence

Export all oligos as CSV(Excel) Export selected oligos as CSV

List of oligo sequences: you can filter (using the lens icon in the bottom of the grid), sort (clicking on the header column), scroll the data in the grid (using the pagination system)

Data	PartnerCode	Description	DNASequence	Partner	Person	TaxName	TaxID	Sele	edit
+	AMP_COF_P29	Amphora coffeaeformis	TCGTGCGCGTCTGGCTCCACAATTC	1 - UniCam	SPURIO Roberto	cellular organik	131567	<input checked="" type="checkbox"/>	
+	AMP_COF_P29_R	Amphora coffeaeformis	CGCTGCGCAACCGGAATGCATCATC	1 - UniCam	SPURIO Roberto	Amphora	59796	<input checked="" type="checkbox"/>	
+	AMP_COF_P22	Amphora coffeaeformis	TTCTTCCTCGTCGCGTCTGGCTCC	1 - UniCam	SPURIO Roberto			<input checked="" type="checkbox"/>	
+	AMP_COF_P22_R	Amphora coffeaeformis	GGATCCCGGCGCTGCGCAACCGCGAA	1 - UniCam	SPURIO Roberto			<input checked="" type="checkbox"/>	
+	AMP_COF_P25	Amphora coffeaeformis	CGAGATTTCCTGCGCGCGCGCACA	1 - UniCam	SPURIO Roberto			<input checked="" type="checkbox"/>	
+	AMP_COF_P25_R	Amphora coffeaeformis	CCAGACCGACAAGGCGACCCACGGCT	1 - UniCam	SPURIO Roberto			<input checked="" type="checkbox"/>	
+	AMP_COF_P20	Amphora coffeaeformis	CGCTCTCGTTCTGTTGATGATGCC	1 - UniCam	SPURIO Roberto			<input checked="" type="checkbox"/>	
+	AMP_COF_P20_R	Amphora coffeaeformis	GCTTTCTGCTCGATGTCGAAGAAC	1 - UniCam	SPURIO Roberto			<input checked="" type="checkbox"/>	

2. Scroll down to the "Organism" field set, and either enter a name of the species against which the oligo was designed or, if available, enter the NCBI taxomic ID and click "Find"

DNA probe sequence (5'→3')

TTCTTCCTCGTCGCGTCTGGCTCC

### ORGANISM

Taxonomy database maintained by NCBI/GenBank

Taxonomy identifier

Research using taxonomy names: Amphora Find by name

Taxonomy name

Research using taxonomy id: Find by id(s)

Taxonomy database maintained by NCBI/GenBank

Additional data

Length: 26; Tm: 68.5; GC Content: 65.4 Random sequence

Search using species name or any name belonging to any taxonomy level

Search using NCBI taxonomic unique identifier

3. The browser will display a complete classification of the species and all the levels available for the particular species in NCBI database. To select any level and ID, simply click on the button, available in front of names in green.

ORGANISM

Taxonomy database maintained by NCBI/GenBank

Research using taxonomy name:

1268808	1203290	1191075	1191017	1136018	1052887	876348	Research using taxonomy id:
655748	654885	654884	650507	565056	565055	565054	
555830	538918	431337	431329	431328	431327	431326	
288119	284695	265586	265554	216748	216711	97221	

63140 59796 1268808,1203290,1191075

- | 131567: cellular organisms --> [no rank] ☒ ☒
- | 2759: Eukaryota --> [superkingdom] ☒ ☒
- | 33634: Stramenopiles --> [no rank] ☒ ☒
- | 2836: Bacillariophyta --> [phylum] ☒ ☒
- | 33849: Bacillariophyceae --> [class] ☒ ☒
- | 33850: Bacillariophycidae --> [no rank] ☒ ☒
- | 216738: Thalassiosyrphales --> [order] ☒ ☒
- | 59795: Catenulaceae --> [family] ☒ ☒
- | 59796: Amphora --> [genus] ☒ ☒
- | 1268808: Amphora sp. M4CC4 --> [species] ☒ ☒
- | 1203290: Amphora sp. RH-2012 --> [species] ☒ ☒

select any taxonomic name/ID by clicking the green button

4. The selected oligo will automatically get updated with the taxonomy name and ID.

## Oligo sequences

New oligo sequence

Export all oligos as CSV(Excel)

Export selected oligos as CSV

List of oligo sequences: you can filter (using the lens icon in the bottom of the grid), sort (clicking on the header column), scroll the data in the grid (using the pagination system)

Det	PartnerCode	Description	DNASequence	Partner	Person	TaxName	TaxID	Sele	edit
+ i	AMP_COF_P29	Amphora coffeaformis	TCGTCGCCGTCTGGCTCCACAATTC	1 - UniCam	SPURIO Roberto	cellular organism	131567	<input checked="" type="checkbox"/>	<input type="button" value="edit"/>
+ i	AMP_COF_P29_R	Amphora coffeaformis	CGCTGCGCAACCGCAATGCATCATC	1 - UniCam	SPURIO Roberto	Amphora	59796	<input checked="" type="checkbox"/>	<input type="button" value="edit"/>
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+ i	Amp_COF_P22_R	Amphora coffeaformis	GGATCCCGCGCTGCGCAACGCGCA	1 - UniCam	SPURIO Roberto			<input checked="" type="checkbox"/>	<input type="button" value="edit"/>
+ i	Amp_COF_P25	Amphora coffeaformis	CGAGATTCTCGCCCGCGCGCAC	1 - UniCam	SPURIO Roberto			<input checked="" type="checkbox"/>	<input type="button" value="edit"/>
+ i	Amp_COF_P25_R	Amphora coffeaformis	CCAGACCGACAAGCGACCCACGG	1 - UniCam	SPURIO Roberto			<input checked="" type="checkbox"/>	<input type="button" value="edit"/>
+ i	AMP_COF_P20	Amphora coffeaformis	CGCTCTCGTTCCTGTTGATGATGCC	1 - UniCam	SPURIO Roberto			<input checked="" type="checkbox"/>	<input type="button" value="edit"/>
+ i	AMP_COF_P20_R	Amphora coffeaformis	GCTTTCTGCTCGATGTCGAAGAAC	1 - UniCam	SPURIO Roberto			<input checked="" type="checkbox"/>	<input type="button" value="edit"/>
+ i	AMP_COF_P21	Amphora coffeaformis	ACCGGCACCATCAGCAGCACGACA	1 - UniCam	SPURIO Roberto			<input checked="" type="checkbox"/>	<input type="button" value="edit"/>
+ i	AMP_COF_P21_R	Amphora coffeaformis	GCCAGGTGGTGGCGGATGAGGGCA	1 - UniCam	SPURIO Roberto			<input checked="" type="checkbox"/>	<input type="button" value="edit"/>
+ i	NIT_DIS_P24	Nitzschia dissipata (R)	GACGCGCAACATCGCCGACATGAA	1 - UniCam	SPURIO Roberto			<input checked="" type="checkbox"/>	<input type="button" value="edit"/>
+ i	NIT_DIS_P24_R	Nitzschia dissipata (R)	CAACACTGGTTCCACTTGTAGTAGC	1 - UniCam	SPURIO Roberto			<input checked="" type="checkbox"/>	<input type="button" value="edit"/>
+ i	NIT_DIS_P27	Nitzschia dissipata (R)	CCGACTCGATCGCGGCTCTGAT	1 - UniCam	SPURIO Roberto			<input checked="" type="checkbox"/>	<input type="button" value="edit"/>

Selected taxonomic name and ID are automatically displayed