

Table S1. List of compounds included in the mix added to the bathypelagic water on day 9 of the experiment.

Compound	Molecular formulae	Final estimated concentration ($\mu\text{mol C L}^{-1}$)
D-glucose	$\text{C}_6\text{H}_{12}\text{O}_6$	2.22
Sodium acetate	$\text{C}_2\text{H}_3\text{O}_2\text{Na}$	2.22
Sodium pyruvate	$\text{C}_3\text{H}_3\text{NaO}_3$	2.22
Humic acids	-Unknown-	2.22
Cellulose	$(\text{C}_6\text{H}_{10}\text{O}_5)_n$	2.22
Chitin	$(\text{C}_8\text{H}_{15}\text{NO}_6)_n$	2.22
D-aspartic	$\text{C}_4\text{H}_7\text{NO}_4$	2.22
N-acetyl-D-glucosamine	$\text{C}_8\text{H}_{15}\text{NO}_6$	2.22
L-arginine hydrochloride	$\text{C}_6\text{H}_{14}\text{N}_4\text{O}_2$	0.22
L-histidine hydrochloride	$\text{C}_6\text{H}_9\text{N}_3\text{O}_2 \cdot \text{HCl}$	0.22
L-isoleucine	$\text{C}_6\text{H}_{13}\text{NO}_2$	0.22
L-leucine	$\text{C}_6\text{H}_{13}\text{NO}_2$	0.22
L-lysine hydrochloride	$\text{C}_6\text{H}_{14}\text{N}_2\text{O}_2$	0.22
L-methionine	$\text{C}_5\text{H}_{11}\text{NO}_2\text{S}$	0.22
L-phenylalanine	$\text{C}_9\text{H}_{11}\text{NO}_2$	0.22
L-threonine	$\text{C}_4\text{H}_9\text{NO}_3$	0.22
L-tryptophan	$\text{C}_{11}\text{H}_{12}\text{N}_2\text{O}_2$	0.22
L-valine	$\text{C}_5\text{H}_{11}\text{NO}_2$	0.22