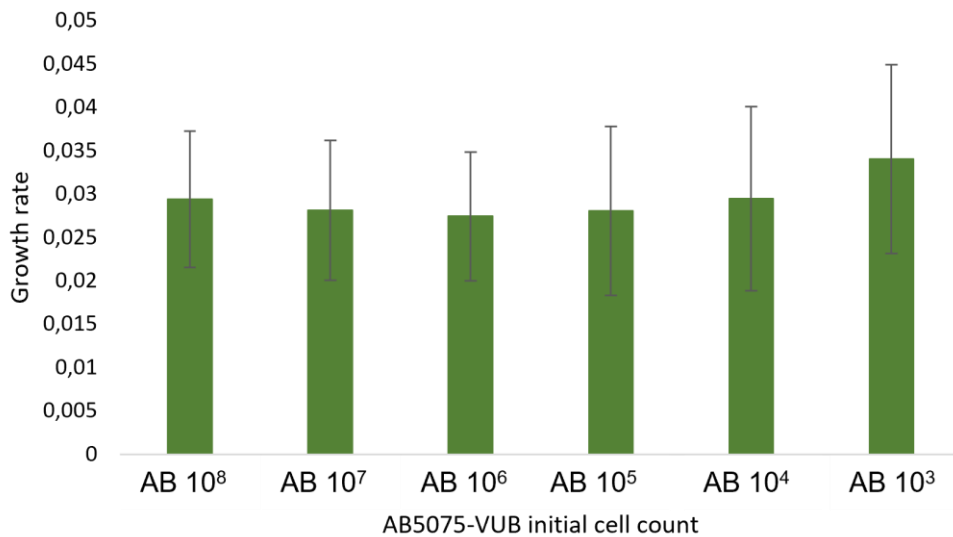


Supplementary Table S1. Phylogenetic affiliation of the 114 sponge-isolated bacterial strains.

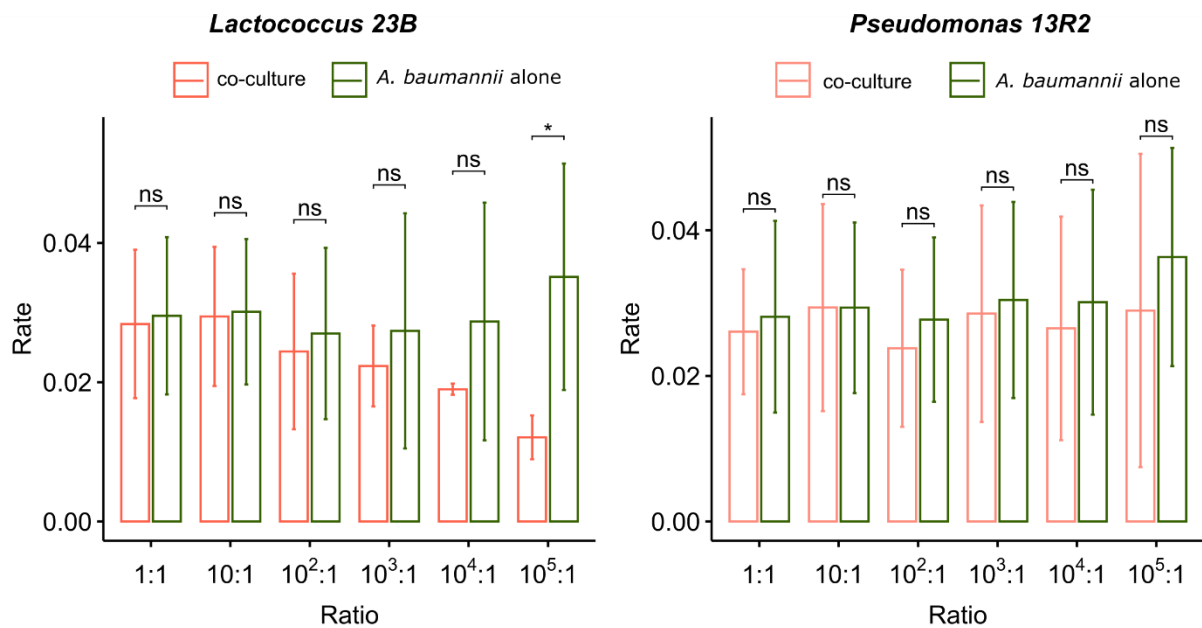
Phylum	Genus	No. strains	Strains
Actinobacteria	<i>Curtobacterium</i>	1	11e
	<i>Nocardiodaceae spp.</i>	3	2d, 11d, 12d
	<i>Rhodococcus</i>	1	2b
Bacteroidota	<i>Aquimarina</i>	3	3c, 8c, 13e
	<i>Dokdonia</i>	2	6a, 9a
	<i>Maribacter</i>	3	12a, 15c, 18c
Firmicutes	<i>Bacillus</i>	2	1b, 6d
	<i>Enterococcus</i>	6	11M, 15B2, 17B2, 23M, 34M, 37B2
	<i>Lactococcus</i>	11	12M, 16B2, 23B, 23R, 24B, 25R2, 26B2, 31B, 31R, 32B, 33B2
	<i>Lysinibacillus</i>	1	19M2
	<i>Paenibacillus</i>	1	8d
	<i>Vagococcus</i>	5	12B2, 25B2, 35B2, 36B2, 110B2
α -Proteobacteria	<i>Denitrobaculum</i>	3	17c, 19c, 20c
	<i>Paracoccus</i>	6	1d, 3d, 4d, 5d, 7d, 9e
	<i>Ruegeria</i>	3	3b, 5b, 14a
γ -Proteobacteria	<i>Aeromonas</i>	3	11R2, 29R2, 34R2
	<i>Buttiauxella</i>	1	22B
	<i>Citrobacter</i>	13	13B2, 14B2, 14R2, 18B2, 19B2, 21B2, 22B2, 22R2, 24R2, 27R2, 31B2, 32B2, 34B2
	<i>Enterobacteriaceae spp.</i>	3	35R, 211R2, 210R2
	<i>Marinomonas</i>	1	14M
	<i>Morganella</i>	2	17R2, 18R2
	<i>Oceanimonas</i>	2	13M, 32M2
	<i>Proteus</i>	1	11B2
	<i>Pseudoalteromonas</i>	1	2c
	<i>Pseudomonas</i>	20	11B, 12B, 12R, 13R, 13R2, 14R, 21R, 22R, 23R2, 24R, 26R2, 31R2, 32R2, 33B, 33R, 34B, 34R, 36R, 36R2, 36M2
	<i>Vibrio</i>	16	1c, 1e, 2e, 3e, 4e, 5c, 5e, 6c, 6e, 7c, 7e, 8e, 9c, 10c, 12e, 15a

Supplementary Table S2. Cell densities of sponge-isolated bacterial strain cultures at stationary phase. OD₆₀₀, optical density measured at 600nm wavelength, cells/mL = cell concentration measured by flow cytometry, standard deviation (SD) of flow cytometry cell count.

Strain	OD ₆₀₀	cells/ml	SD
12B2	0,429	7,26E+08	7,12E+07
25R2	0,3706	1,87E+09	7,57E+07
23B	0,5731	5,01E+08	5,60E+07
33R	0,395	4,67E+08	6,29E+07
13R2	0,5282	4,23E+08	4,66E+07



Supplementary Figure S1. Growth rate (h⁻¹) of AB5075-VUB in pure culture at different starting cell counts (from 10⁸ to 10³ cells/ 200μL well).



Supplementary Figure S2. Growth rate (h⁻¹) of AB5075-VUB measured by fluorescence monitoring, alone and in co-culture with non-inhibitory control sponge-isolated strains. The initial cell count ratio in the co-cultures (or corresponding initial quantity in the case of pure cultures of AB5075-VUB) is presented on the x axis.