



Supplementary Fig. S1. Growth of different *Acinetobacter* strains after 72 h in mineral medium containing carbon sources with variable chain lengths, expressed as (mg protein ml⁻¹) day⁻¹. Carbon 0: inoculated mineral medium (no carbon source); carbon 10, carbon 14, carbon 20: alkanes with different chain lengths. All measurements were done in quadruplicate, except for the control (n = 11). Mean values (± SEM) are presented. The two-headed arrows delineate the results for the five *A. venetianus* strains for each carbon source.

Supplementary Table S1. *P*-values of the differences in delta yield over the range of carbon sources used between the various strains and the *A. venetianus* control strain RAG-1^T

Negative values indicate values lower than those obtained for the *A. venetianus* control strain.

The following model was used: $\text{delta yield} = (a_1) \times \text{dummy} + (a_2) \times \text{carbon range} + (a_3) \times \text{dummy} \times \text{carbon range} + a_4$, in which

delta yield = difference in yield between a specific carbon source to the medium without carbon [in (mg protein ml⁻¹) day⁻¹]

dummy = control strain (0) versus test strain (1)

carbon range = results obtained at source 10, 14 and 20

a_{1-3} = coefficients in regression model

a_4 = rest coefficient.

Strain	Difference		
	Dummy	Carbon-range	Interaction
LUH 4379		0.000	-0.000
LUH 5627		0.000	-0.000
LUH 7437		0.000	
LUH 8758		0.000	
RUH 2215		0.001	-0.002
RUH 2228		0.002	-0.000
RUH 2867		0.000	-0.000
LUH 1717		0.000	
LUH 1726	-0.001	0.000	
LUH 1729		0.000	-0.000
LUH 1731		0.000	-0.000
LUH 1735	-0.016	0.000	
LUH 9346		0.000	-0.001
RUH 2219		0.000	-0.000
RUH 2865		0.000	-0.000
RUH 3023		0.000	-0.000

Using analysis of variance and step-wise multiple regression (Armitage *et al.*, 2002; Kleinbaum *et al.*, 1998), the difference in yield over C10, C14 and C20 (to that of C0) was compared between a specific strain and the control strain after the same number of days of experimentation. The applied model to test the carbon-dependent growth of the various strains of bacteria turned out to describe the data significantly ($P < 0.001$). This model allows statistical testing not only of the difference in yield but also of the dose-dependent (with respect to carbon source) growth difference between both strains (Kleinbaum *et al.*, 1998).

A *P*-value of lower than 0.05 was considered to be significant.

References

Armitage, P., Berry, G. & Matthews, J. N. S. (2002). *Statistical Methods in Medical Research*, 4th edn. Oxford, UK: Blackwell Publishing.

Kleinbaum, D. G., Kupper, L. L., Muller, K. E. & Nizam, A. (1998). *Applied Regression Analysis and other Multivariable Methods*, 3rd edn. Duxbury, CA: Duxbury Press.