

**Supplementary table 1.** Identity of spots 1 and 2 (Adh4, fig. 3) based on theoretically and experimentally determined peptide masses.

Protein spots were excised from cCBB-stained 2DE gels of *D. autotrophicum* HRM2 grown with ethanol, 1-propanol, 1-butanol and a mixture of lactate and 1-propanol.

Spot <sup>a</sup>	Peptide position	Theor. mass	Substrate							
			Ethanol		1-Propanol		1-Butanol		Lactate + 1-Propanol	
			Exp.Mass	Δ Da	Exp.Mass	Δ Da	Exp.Mass	Δ Da	Exp.Mass	Δ Da
1	32 – 44	1360.784	1360.752	-0.032	1360.789	+0.005	1360.784	0.000	n.d	n.d
			1360.825	+0.041	1360.776	-0.008	1360.777	-0.007	1360.931	+0.147
1	81 – 91	1178.606	1178.578	-0.028	1178.612	+0.006	1178.599	-0.007	n.d	n.d
			1178.651	+0.045	1178.602	-0.004	1178.590	-0.016	1178.722	+0.116
1	154 – 162	1112.541	1112.535	-0.006	1112.555	+0.014	1112.558	+0.017	n.d	n.d
			1112.610	+0.069	1112.548	-0.007	1112.554	+0.013	1112.666	+0.125
1	234 – 245 <sup>b</sup>	1200.597	1200.600	+0.003	1200.611	+0.014	1200.626	+0.029	n.d	n.d
			1200.664	+0.067	1200.602	+0.005	1200.613	+0.016	1200.731	+0.134
1	328 – 351	2395.354	2395.280	-0.065	2395.327	-0.018	2395.370	+0.025	n.d	n.d
			2395.345	0.000	2395.250	+0.005	2395.395	+0.050	1395.637	+0.292

nd, not detected

<sup>a</sup> Spot numbering is as used in fig. 3

<sup>b</sup> Peptide was also confirmed by Edman-sequencing.