

Table S7. Net and exchange fluxes during growth on [2,4-¹³C]butyrate with unlabeled NaHCO₃.

Reaction	Wild type				NifA*			
	net flux	90% CI	xch flux	90% CI	net flux	90% CI	xch flux	90% CI
<i>Uptake</i>	50.0	0.0			50.0	0.0		
<i>Beta-oxidation</i>								
<i>CS</i>	50.0	0.0			50.0	0.0		
<i>IDH</i>	33.5	1.9			31.5	1.6		
<i>αKDH</i>	8.5	1.1			7.0	0.8		
<i>αKDH2</i>	1.1	0.2			0.6	0.1		
<i>SDH</i>	1.1	0.2			0.6	0.1		
<i>MDH</i>	26.5	1.4			24.9	1.4		
<i>ILy</i>	51.0	2.7			48.6	2.7		
<i>ILy2</i>	12.5	0.7	7	5, 9	12.2	0.7	3	3, 4
<i>MSyn</i>	12.5	0.7	7	5, 9	12.2	0.7	3	3, 4
<i>PK</i>	25.0	1.4	2	0, 6	24.5	1.3	8	5, 10
<i>PEPCK</i>	9.5	1.3			7.9	0.8		
<i>PDH_POR</i>	10.4	1.3	16	14, 18	11.0	1.6	7	6, 7
<i>MEnz</i>	-6.1	1.3	0	0, 2	-5.3	1.0	8	0, 32
<i>Eno</i>	0.5	0.2			0.8	0.2		
<i>GAPDH</i>	-2.6	1.0	117	100, 139	0.0	1.7	138	118, 165
<i>Ald</i>	108.1	4.5			82.2	10.4		
<i>PGI</i>	22.7	1.2			16.6	2.6		
<i>Rubisco</i>	1.8	0.8			1.6	1.3		
<i>S7Ald</i>	58.3	2.4			43.7	6.0		
<i>OPPP</i>	20.0	0.8			15.8	1.8		
<i>net_CO2</i>	0.0	0.8			0.0	1.3		
<i>TK1</i>	-32.1	1.6			-19.6	6.2		
<i>TK2</i>	21.2	0.9			16.0	1.9		
<i>TA</i>	19.5	0.8			14.6	1.8		
<i>vAsp</i>	0.4	0.0			1.1	0.0		
<i>vAspout</i>	4.6	0.5			4.0	0.4		
<i>vThr</i>	1.9	0.3			1.6	0.2		
<i>vThROUT</i>	1.6	0.3			1.3	0.2		
<i>vIleT</i>	2.8	0.4			2.4	0.4		
<i>vIleC</i>	1.0	0.2			0.8	0.1		
<i>vIle3</i>	1.1	0.2			1.0	0.2		
<i>vIle_out</i>	1.1	0.2			1.0	0.2		
<i>vVal</i>	0.1	0.0			0.1	0.0		
<i>vVal2</i>	1.9	0.2			1.7	0.2		
<i>vVal_out</i>	1.9	0.2			1.7	0.2		
<i>vLeu</i>	1.6	0.3			1.4	0.2		
	2.2	0.4			2.0	0.3		

<i>vLeu_out</i>	2.2	0.4	2.0	0.3
<i>vSer</i>	5.9	0.6	5.1	0.5
<i>vSer_out</i>	2.6	0.4	2.2	0.4
<i>vGly</i>	3.4	0.5	2.9	0.4
<i>vGly_out</i>	3.0	0.5	2.6	0.4
<i>vMet</i>	0.2	0.0	0.1	0.0
<i>vMet_out</i>	0.2	0.0	0.1	0.0
<i>vPhe1</i>	1.5	0.2	1.3	0.2
<i>vPhe2</i>	1.5	0.2	1.3	0.2
<i>vPhe_out</i>	1.5	0.2	1.3	0.2
<i>vG6P_out</i>	1.8	0.3	1.6	0.2
<i>vF6P_out</i>	0.1	0.0	0.1	0.0
<i>vpp_out</i>	1.8	0.3	1.5	0.2
<i>vG3P_out</i>	1.4	0.2	1.1	0.2
<i>vPEP_out</i>	0.5	0.1	0.4	0.1
<i>vE4P_out</i>	0.1	0.0	0.1	0.0
<i>vPyr_out</i>	5.9	0.9	5.2	0.8
<i>vAc_out</i>	10.8	1.7	9.8	1.4
<i>vOAA_out</i>	2.4	0.4	2.1	0.3
<i>vaKG_out</i>	6.3	0.9	5.9	0.8
<i>vS7P_out</i>	0.1	0.0	0.1	0.0
<i>v_AL</i>	0.3	0.0	0.4	0.0
<i>v_BChl</i>	0.3	0.0	0.3	0.0
<i>v_Pent</i>	0.3	0.1	0.4	0.1
<i>vAL_out</i>	0.1	0.0	0.1	0.0
<i>vBC_out</i>	0.3	0.0	0.3	0.0
<i>vPent_out</i>	0.3	0.1	0.4	0.1
<i>vCI_out</i>	3.2	0.5	2.8	0.4
<i>Ace_out</i>	21.4	3.4	26.1	2.7

Exchange fluxes (xch fluxes; ranging from zero to infinity) that could be determined are shown with non-symmetrical 90% confidence intervals.