

**Table 4.** Contribution of the different transmembrane isoleucine fluxes in *C. glutamicum* and their regulation under different metabolic conditions

Isoleucine concentration (mmol l <sup>-1</sup> )		State of activity of		Isoleucine flux <sup>a</sup> mediated by			sum = production
internal	external	uptake system	excretion system	diffusion	uptake	excretion	
0.5	0.5	off	off	0	0	0	- 0
4	0.5	on	off	0.5	- 1.2	0	- 0.7
20	0.5	on	on	2.7	- 1.2	6	7.5
100	0.5	on	on	13	- 1.2	14	26
20	50	on	on	- 3.9	- 1.2	5.3	0
20	100	on	on	- 10.4	- 1.2	4.5	- 7.1
100	100	on	on	0	- 1.2	10	8.8
100	150	on	on	- 7	- 1.2	8	- 0.2

<sup>a</sup>Positive sign: efflux direction of flux; negative sign: uptake direction of flux