

Table 2 The maximum optical density (OD₆₀₀), lag phase (h), and doubling time (h) of three *E. coli* strains K10zwf, K12, and DL323 in aerobic batch cultures in three different minimal media of LMR, SPG, and M9

Strain	Carbon Source	Media	Max (OD ₆₀₀)	Lag Phase (h)	DT (h)	References
K12	Glycerol	SPG	2.3±0.1	1	1.4±0.04	This work
K12	Glycerol	LMR	2.4±0.1	1	1.3±0.1	This work
K12	Glycerol	M9	1.9±0.1	1	1.7±0.1	This work
<i>K12</i>	<i>Glycerol</i>	<i>M9</i>	<i>0.83</i>	<i>1</i>	<i>(2.2)</i>	<i>Paliy and Gunasekera 2007</i>
<i>MG1655</i>	<i>Glycerol</i>	<i>M9</i>	<i>n/a</i>	<i>n/a</i>	<i>(1.3)</i>	<i>Liu et al. 2005</i>
<i>MC4100</i>	<i>Glycerol</i>	<i>M9</i>	<i>n/a</i>	<i>n/a</i>	<i>(1)</i>	<i>Oh and Liao 2000</i>
<i>K-10</i>	<i>Glucose</i>	<i>M9</i>	<i>n/a</i>	<i>n/a</i>	<i>(1)</i>	<i>Fraenkel 1968</i>
<i>MG1655</i>	<i>Glucose</i>	<i>M9</i>	<i>n/a</i>	<i>n/a</i>	<i>(0.9)</i>	<i>Canonaco et al. 2001</i>
<i>MG1655</i>	<i>Glucose</i>	<i>M9</i>	<i>n/a</i>	<i>n/a</i>	<i>(0.7)</i>	<i>Liu et al. 2005</i>
<i>MG1655</i>	<i>Glucose</i>	<i>M9</i>	<i>n/a</i>	<i>n/a</i>	<i>(1.1)</i>	<i>Nicolas et al. 2007</i>
<i>MC4100</i>	<i>Glucose</i>	<i>M9</i>	<i>n/a</i>	<i>n/a</i>	<i>(0.7)</i>	<i>Oh and Liao 2000</i>
K12	Acetate	SPG	1.6±0.1	4±1	0.9±0.1	This work
K12	Acetate	LMR	1.7±0.1	4±1	1±0.2	This work
K12	Acetate	M9	1.1±0.1	5±1	3.1±0.6	This work
<i>K12</i>	<i>Acetate</i>	<i>M9</i>	<i>0.85</i>	<i>5</i>	<i>(3.4)</i>	<i>Paliy 2007</i>
<i>MG1655</i>	<i>Acetate</i>	<i>M9</i>	<i>n/a</i>	<i>n/a</i>	<i>(3.3)</i>	<i>Liu et al. 2005</i>
<i>BW25113</i>	<i>Acetate</i>	<i>M9</i>	<i>n/a</i>	<i>n/a</i>	<i>(3.5)</i>	<i>Zhao et al. 2004</i>
<i>MC4100</i>	<i>Acetate+arginine</i>	<i>M9</i>	<i>n/a</i>	<i>n/a</i>	<i>(2.1)</i>	<i>Oh et al. 2002</i>
MC4100	Acetate	M9	n/a	n/a	(2.3)	Oh and Liao 2000
K10zwf	Glycerol	SPG	1.9±0.1	<2	1.6±0.1	This work
K10zwf	Glycerol	LMR	2.2±0.1	<2	1.2±0.1	This work
K10zwf	Glycerol	M9	1.5±0.1	<2	1.5±0.1	This work
<i>Zwf-</i>	<i>Glucose</i>	<i>M9</i>	<i>n/a</i>	<i>n/a</i>	<i>(1.1)</i>	<i>Fraenkel 1968</i>
<i>Zwf-</i>	<i>Glucose</i>	<i>M9</i>	<i>n/a</i>	<i>n/a</i>	<i>(1)</i>	<i>Nicolas et al. 2007</i>
<i>Zwf-</i>	<i>Glucose</i>	<i>M9</i>	<i>n/a</i>	<i>n/a</i>	<i>(1.2)</i>	<i>Nicolas et al. 2007</i>
<i>Zwf-</i>	<i>Glucose</i>	<i>M9</i>	<i>n/a</i>	<i>n/a</i>	<i>(1)</i>	<i>Rowley et al. 1991</i>
K10zwf	Acetate	SPG	1.9±0.1	4±1	2.1±0.3	This work
K10zwf	Acetate	LMR	1.8±0.1	4±1	2.3±0.3	This work
K10zwf	Acetate	M9	1.0±0.1	6±1	2.4±0.2	This work
<i>K10-1516</i>	<i>Acetate</i>	<i>M9</i>	<i>n/a</i>	<i>n/a</i>	<i>(4)</i>	<i>Rowley et al. 1991</i>
<i>K10-1516</i>	<i>Acetate</i>	<i>M9</i>	<i>n/a</i>	<i>n/a</i>	<i>(3.5)</i>	<i>Zhao et al. 2004</i>
DL323	Glycerol	SPG	2.2±0.1	≤1	1.6±0.03	This work
DL323	Glycerol	LMR	2.7±0.1	≤1	1.7±0.1	This work
DL323	Glycerol	M9	2.2±0.2	≤1	1.9±0.1	This work
<i>sdh-/mdh-</i>	<i>Glucose</i>	<i>M9</i>	<i>n/a</i>	<i>n/a</i>	<i>(1.4)</i>	<i>Fischer and Sauer 2003</i>
DL323	Acetate	SPG	1.6±0.1	7±1	1.3±0.1	This work
DL323	Acetate	LMR	1.5±0.1	10±1.5	1.3±0.1	This work
DL323	Acetate	M9	0.1±0.1	>30	—	This work
<i>mdh</i>	<i>Acetate</i>	<i>M9</i>	<i>No growth</i>			<i>Hansen and Juni 1979</i>

These media are supplemented with 0.2% glycerol or 0.3% acetate. The values are shown as arithmetic mean±standard error of the mean (*n*=3). Also shown, in italics and for comparison, are previous measurements on various *E. coli* strains and media