



UvA-DARE (Digital Academic Repository)

Regulation of pyruvate catabolism in *Escherichia coli*: the role of redox environment

de Graef, M.R.

Publication date
1999

[Link to publication](#)

Citation for published version (APA):

de Graef, M. R. (1999). *Regulation of pyruvate catabolism in Escherichia coli: the role of redox environment*.

General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

ABBREVIATIONS

ac	acetate
ac-CoA	acetyl coenzyme-A
ATP	adenosine-5'-triphosphate
CoA	coenzyme-A
D	dilution rate (h^{-1})
(k)Da	(kilo)Dalton
DOT	dissolved oxygen tension
DRW	dry weight
ϵ	extinction coefficient ($\text{M}^{-1} \text{cm}^{-1}$)
E_h	redoxpotential
$E_{m,7}$	midpoint redox potential at pH 7
E1	pyruvate dehydrogenase, pyruvate:lipoate oxidoreductase (EC 1.2.4.1)
E2	dihydrolipoyl transacetylase, acetyl-CoA:dihydrolipoamide S-acetyltransferase (EC 2.3.1.12)
E3	dihydrolipoamide dehydrogenase, NADH:lipoamide oxidoreductase (EC 1.8.1.4)
enzyme activity <i>in vitro</i>	Enzyme activity, measured in a cellfree extract under standard conditions
enzyme activity <i>in vivo</i>	enzyme activity, measured as a flux through the enzyme in whole cells
etOH	ethanol
FAD(H)	(reduced) flavin adenine dinucleotide
for	formate
glc	glucose
k_m	Michaelis constant: substrate concentration at the half maximal reaction velocity
lac	lactate
LB	Luria Bertani medium
LDH	lactate dehydrogenase
NAD(H)	(reduced) nicotinamide adenine dinucleotide
ND	not determined
q	specific rate of consumption or production
PDHc	pyruvate dehydrogenase complex
PFL	pyruvate formate lyase (EC 2.3.1.54)
pyr	pyruvate
SD	standard deviation
T	temperature

