Table 2a
Glycolytic ATP contribution in normal cells

Cell type	Oxidative ATP production	Lactate production	Glycolytic ATP contribution[a] (%)	Reference
Adult mouse liver	4.69 μmol/h/mg	0.0446 μmol/h/mg	0.94	[1]
Adult mouse kidney	4.6 μmol/h/mg	0.0446 μmol/h/mg	0.94	[1]
Mouse macrophages	243 nmol/h/mg	51.9 nmol/h/mg	18	[28]
Pig platelets	1.32 mmol/min/10^{11} platelets	1.77 mmol/min/10^{11} platelets	57	[29]
Rat anococcygeus smooth muscle	2.08 mmol/min/g	0.212 mmol/min/g	9.3	[30]
Neonatal rat cardiomyocytes	16.39 nmol/min/10^6 cells	0.40 nmol/min/10^6 cells	2.4	[31]
Rabbit erythrocytes	2 mmol/h/cell	2.74 mmol/h/cell	58	[32]
Rabbit reticulocytes	201.7 mmol/h/cell	4.83 mmol/h/cell	2.3	[32]
Rat thymocytes (resting)	957 mmol/h/10^{10} cells	40 mmol/h/10^{10} cells	4.0	[33]
Rat thymocytes (proliferating)	880 mmol/h/10^{10} cells	1363 mmol/h/10^{10} cells	41	[33]
Rat heart H9c2	1282.5 nmol/h/10^6 cells	33 nmol/h/10^6 cells	2.5	[34]
Dog kidney cells	72.8 nmol/min/mg	24.3 nmol/min/mg	25	[35]
Porcine coratid artery smooth muscle	0.370 μmol/min/g	0.103 μmol/min/g	22	[36]
Rat coronary endothelial cells	22.4 nmol/min/mg	25.4 nmol/min/mg	53	[37]
Human platelets	19 mmol/h/10^{10} platelets	6 mmol/h/10^{10} platelets	24	[38]
In vivo rat small intestine	9750 nmol/min/g intestine	154.3 nmol/min/g intestine	1.6	[39]
Average contribution of glycolysis[b]			20 ± 21 ($n = 16$)	

The P/O_2 ratio used in the original calculations ranged between 5 and 6. Different fuels such as glucose (4–10 mM), glutamine (0.5–4 mM), palmitate (0.1 mM), β-hydroxybutyrate (0.044 mM), acetate (0.05–2 mM), lactate (0.5 mM), and fetal bovine serum (10%) were selectively added into the medium in different experiments.

[a] The glycolytic ATP contribution is expressed as a percentage of total ATP production.

[b] Average contribution of glycolysis is expressed as mean ± SD.

Table 2b
Glycolytic ATP contribution in tumour cells

Cell type	Oxidative ATP production	Lactate production	Glycolytic ATP contribution[a] (%)	Reference
Mouse ascites cancer	2.19 μmol/h/mg	2.68 μmol/h/mg	55	[1]
Hepatoma 5123[c]	25.35 μl/h/35–40 mg	0.5 μl/h/35–40 mg	1.9	[40]
Hepatoma 5123[c]	33 μmol/h/30–35 mg	0.84 μmol/h/30–35 mg	2.5	[41]
Sarcoma 37 ascites	53 μmol/h/30–35 mg	24.6 μmol/h/30–35 mg	32	[41]
Hepatoma Reuber H-35	82 μmol/h/30–35 mg	1.0 μmol/h/30–35 mg	1.2	[42]
Hepatoma Morris 3924A	19 μmol/h/30–35 mg	8.3 μmol/h/30–35 mg	30	[42]
Hepatoma Morris 7793	107.5 μmol/h/30–35 mg	0.7 μmol/h/30–35 mg	0.65	[42]
Hepatoma Morris 7795	66 μmol/h/30–35 mg	0.9 μmol/h/30–35 mg	1.4	[42]
Hepatoma Morris 7800	79 μmol/h/30–35 mg	4.9 μmol/h/30–35 mg	5.8	[42]
Hepatoma Morris 7288C	20 μmol/h/30–35 mg	7.7 μmol/h/30–35 mg	28	[42]
Hepatoma Morris 7316B	120.5 μmol/h/30–35 mg	9.7 μmol/h/30–35 mg	7.5	[42]
Hepatoma Morris 3683	23 μmol/h/30–35 mg	17 μmol/h/30–35 mg	43	[42]
Hepatoma Dunings LC18	13 μmol/h/30–35 mg	7 μmol/h/30–35 mg	35	[42]
Hepatoma Primary DAB	18.5 μmol/h/30–35 mg	4.1 μmol/h/30–35 mg	18	[42]
Hepatoma Novicoff	11 μmol/h/30–35 mg	19.4 μmol/h/30–35 mg	64	[42]
AS-30D Hepatoma	65 nmol/min/10^7 cells	1.35 nmol/min/10^7 cells	2	[43]
Hepatoma 7777	Data not shown	433 nmol/h/mg protein	26	[27]
Ehrlich ascites tumor[d]	2.75 nmol/min/10^6 cells	1.30 nmol/min/10^6 cells	32	[44]
Ehrlich mouse ascites tumour[d]	466.0 mmol/h/cell	260.2 mmol/h/cell	36	[45]
Ehrlich ascites[d]	118.2 nmol/min/mg	60.2 nmol/min/mg	34	[46]
Ehrlich ascites tumour[d]	7.5 nmol/min/10^6 cells	4.62 nmol/min/10^6 cells	38	[47]
Mouse fibrosarcoma 1929	25.5 μmol/h/mg	0.08 μmol/h/mg	0.31	[48]
Transformed hamster brain	106.4 nmol/min/mg	44.1 nmol/min/mg	29	[46]
Transformed erythroid precursors (J2E cells)	5.52 μmol/h/10^7 cells	1.23 μmol/h/10^7 cells	18	[49]
Breast carcinoma[e]	9.25 μmol/g/min	0.45 μmol/g/min	4.9	[50–53]
Ovarian carcinoma[e]	9.16 μmol/g/min	0.29 μmol/g/min	3.1	[50,51]
Melanoma[e]	14.8 μmol/g/min	0.50 μmol/g/min	3.3	[50]
Thyroid carcinoma[e]	13.7 μmol/g/min	0.55 μmol/g/min	4.0	[50]
Uterine carcinoma[e]	9.92 μmol/g/min	0.57 μmol/g/min	5.3	[50]
Lung carcinoma[e]	20.4 μmol/g/min	1.13 μmol/g/min	5.3	[50,53]
Rat tumour (DS-carcinosarcoma)	21.6 μmol/g/min	1.57 μmol/g/min	6.8	[50]
Average contribution of glycolysis[b]			17 ± 18 ($n = 27$)	

The P/O_2 ratio ranged between 3.27 and 5.4. Different fuels such as glucose (5–25 mM), glutamine (0.7–5 mM), β-hydroxybutyrate (2 mM), palmitate (0.6 mM), and fetal bovine serum (10%) were selectively added into the medium in different experiments.

[a] The glycolytic ATP contribution is expressed as a percentage of total ATP production.

[b] Average contribution of glycolysis is expressed as mean ± SD.

[c] The data from these two studies were averaged and considered as one value in the statistical analysis.

[d] The data from these four studies were averaged and considered as one value in the statistical analysis.

[e] This value is an average of the values in the cited papers.