

Table 15: Expression changes in oxidative phosphorylation for the gastric bypass study.

Alphabetized list of reactions in oxidative phosphorylation (as defined by Recon 1). Ratio is the average log₁₀ expression ratio ($n=3$) of post-/pregene expression measurements (see text for details). Negative ratios (green) indicate a decrease in expression postsurgery, whereas positive ratios indicate an increase (red). Values denoted with “n/a” indicate that gene expression values were unavailable, or that expression ratios conflicted at the probe or patient levels.

Reaction	Putative function	Locus	Ratio
ATPS4m	ATP synthase (four protons for one ATP)	517.1	-0.111
ATPS4m	ATP synthase (four protons for one ATP)	514.1	-0.104
ATPS4m	ATP synthase (four protons for one ATP)	518.1	-0.102
ATPS4m	ATP synthase (four protons for one ATP)	522.1	-0.093
ATPS4m	ATP synthase (four protons for one ATP)	4905.1	-0.08
ATPS4m	ATP synthase (four protons for one ATP)	516.1	-0.057
ATPS4m	ATP synthase (four protons for one ATP)	521.1	-0.042
ATPS4m	ATP synthase (four protons for one ATP)	509.1	-0.04
ATPS4m	ATP synthase (four protons for one ATP)	10632.1	0.201
ATPS4m	ATP synthase (four protons for one ATP)	513.1	n/a
ATPS4m	ATP synthase (four protons for one ATP)	515.3	n/a
ATPS4m	ATP synthase (four protons for one ATP)	513.2	n/a
ATPS4m	ATP synthase (four protons for one ATP)	9551.1	n/a
ATPS4m	ATP synthase (four protons for one ATP)	522.5	n/a
ATPS4m	ATP synthase (four protons for one ATP)	522.4	n/a
ATPS4m	ATP synthase (four protons for one ATP)	506.1	n/a
ATPS4m	ATP synthase (four protons for one ATP)	515.2	n/a
ATPS4m	ATP synthase (four protons for one ATP)	509.2	n/a
ATPS4m	ATP synthase (four protons for one ATP)	522.2	n/a
ATPS4m	ATP synthase (four protons for one ATP)	518.2	n/a
ATPS4m	ATP synthase (four protons for one ATP)	514.2	n/a
ATPS4m	ATP synthase (four protons for one ATP)	522.3	n/a
ATPS4m	ATP synthase (four protons for one ATP)	517.2	n/a
ATPS4m	ATP synthase (four protons for one ATP)	518.3	n/a
ATPS4m	ATP synthase (four protons for one ATP)	10476.2	n/a
ATPS4m	ATP synthase (four protons for one ATP)	9551.3	n/a
ATPS4m	ATP synthase (four protons for one ATP)	515.1	n/a
ATPS4m	ATP synthase (four protons for one ATP)	498.1	n/a
ATPS4m	ATP synthase (four protons for one ATP)	10476.1	n/a
ATPS4m	ATP synthase (four protons for one ATP)	498.2	n/a
ATPS4m	ATP synthase (four protons for one ATP)	516.2	n/a
ATPS4m	ATP synthase (four protons for one ATP)	498.3	n/a
ATPS4m	ATP synthase (four protons for one ATP)	9551.2	n/a
CYOOm3	cytochrome c oxidase, mitochondrial Complex IV	1329.1	-0.218
CYOOm3	cytochrome c oxidase, mitochondrial Complex IV	1339.1	-0.193
CYOOm3	cytochrome c oxidase, mitochondrial Complex IV	1349.1	-0.073
CYOOm3	cytochrome c oxidase, mitochondrial Complex IV	1327.1	-0.03
CYOOm3	cytochrome c oxidase, mitochondrial Complex IV	9167.1	0.045
CYOOm3	cytochrome c oxidase, mitochondrial Complex IV	1347.1	n/a
CYOOm3	cytochrome c oxidase, mitochondrial Complex IV	1345.1	n/a

Reaction	Putative function	Locus	Ratio
CYOOm3	cytochrome c oxidase, mitochondrial Complex IV	4512.1	n/a
CYOOm3	cytochrome c oxidase, mitochondrial Complex IV	1340.1	n/a
CYOOm3	cytochrome c oxidase, mitochondrial Complex IV	4514.1	n/a
CYOOm3	cytochrome c oxidase, mitochondrial Complex IV	84701.1	n/a
CYOOm3	cytochrome c oxidase, mitochondrial Complex IV	1346.1	n/a
CYOOm3	cytochrome c oxidase, mitochondrial Complex IV	1350.1	n/a
CYOOm3	cytochrome c oxidase, mitochondrial Complex IV	1337.1	n/a
CYOOm3	cytochrome c oxidase, mitochondrial Complex IV	170712.1	n/a
CYOOm3	cytochrome c oxidase, mitochondrial Complex IV	1351.1	n/a
CYOOm3	cytochrome c oxidase, mitochondrial Complex IV	4513.1	n/a
CYOOm3	cytochrome c oxidase, mitochondrial Complex IV	341947.1	n/a
CYOOm3	cytochrome c oxidase, mitochondrial Complex IV	125965.1	n/a
CYOOm3	cytochrome c oxidase, mitochondrial Complex IV	9377.1	n/a
CYOR-u10m	ubiquinol-6 cytochrome c reductase, Complex III	7381.1	-0.242
CYOR-u10m	ubiquinol-6 cytochrome c reductase, Complex III	29796.1	-0.102
CYOR-u10m	ubiquinol-6 cytochrome c reductase, Complex III	10975.1	n/a
CYOR-u10m	ubiquinol-6 cytochrome c reductase, Complex III	7388.1	n/a
CYOR-u10m	ubiquinol-6 cytochrome c reductase, Complex III	1537.1	n/a
CYOR-u10m	ubiquinol-6 cytochrome c reductase, Complex III	4519.1	n/a
CYOR-u10m	ubiquinol-6 cytochrome c reductase, Complex III	29796.2	n/a
CYOR-u10m	ubiquinol-6 cytochrome c reductase, Complex III	7384.1	n/a
CYOR-u10m	ubiquinol-6 cytochrome c reductase, Complex III	7385.1	n/a
CYOR-u10m	ubiquinol-6 cytochrome c reductase, Complex III	27089.1	n/a
CYOR-u10m	ubiquinol-6 cytochrome c reductase, Complex III	7386.1	n/a

Reaction	Putative function	Locus	Ratio
NADH2-u10m	NADH dehydrogenase, mitochondrial	4728.1	-0.219
NADH2-u10m	NADH dehydrogenase, mitochondrial	51079.1	-0.176
NADH2-u10m	NADH dehydrogenase, mitochondrial	7991.1	-0.133
NADH2-u10m	NADH dehydrogenase, mitochondrial	4729.1	-0.129
NADH2-u10m	NADH dehydrogenase, mitochondrial	4696.1	-0.101
NADH2-u10m	NADH dehydrogenase, mitochondrial	4694.1	-0.101
NADH2-u10m	NADH dehydrogenase, mitochondrial	4717.1	-0.091
NADH2-u10m	NADH dehydrogenase, mitochondrial	4719.1	-0.087
NADH2-u10m	NADH dehydrogenase, mitochondrial	4718.1	-0.086
NADH2-u10m	NADH dehydrogenase, mitochondrial	4709.1	-0.076
NADH2-u10m	NADH dehydrogenase, mitochondrial	4708.1	-0.073
NADH2-u10m	NADH dehydrogenase, mitochondrial	4702.1	-0.064
NADH2-u10m	NADH dehydrogenase, mitochondrial	4714.1	-0.055
NADH2-u10m	NADH dehydrogenase, mitochondrial	4711.1	-0.053
NADH2-u10m	NADH dehydrogenase, mitochondrial	4713.1	0.118
NADH2-u10m	NADH dehydrogenase, mitochondrial	7991.2	n/a
NADH2-u10m	NADH dehydrogenase, mitochondrial	4712.1	n/a
NADH2-u10m	NADH dehydrogenase, mitochondrial	4697.1	n/a
NADH2-u10m	NADH dehydrogenase, mitochondrial	4695.1	n/a
NADH2-u10m	NADH dehydrogenase, mitochondrial	4725.1	n/a
NADH2-u10m	NADH dehydrogenase, mitochondrial	4716.1	n/a
NADH2-u10m	NADH dehydrogenase, mitochondrial	4698.1	n/a
NADH2-u10m	NADH dehydrogenase, mitochondrial	4720.1	n/a
NADH2-u10m	NADH dehydrogenase, mitochondrial	4538.1	n/a
NADH2-u10m	NADH dehydrogenase, mitochondrial	126328.1	n/a
NADH2-u10m	NADH dehydrogenase, mitochondrial	4710.1	n/a
NADH2-u10m	NADH dehydrogenase, mitochondrial	4539.1	n/a
NADH2-u10m	NADH dehydrogenase, mitochondrial	4535.1	n/a
NADH2-u10m	NADH dehydrogenase, mitochondrial	4704.1	n/a
NADH2-u10m	NADH dehydrogenase, mitochondrial	4701.1	n/a
NADH2-u10m	NADH dehydrogenase, mitochondrial	4724.1	n/a
NADH2-u10m	NADH dehydrogenase, mitochondrial	4541.1	n/a
NADH2-u10m	NADH dehydrogenase, mitochondrial	4722.1	n/a
NADH2-u10m	NADH dehydrogenase, mitochondrial	4700.1	n/a
NADH2-u10m	NADH dehydrogenase, mitochondrial	4726.1	n/a
NADH2-u10m	NADH dehydrogenase, mitochondrial	4723.1	n/a
NADH2-u10m	NADH dehydrogenase, mitochondrial	4536.1	n/a
NADH2-u10m	NADH dehydrogenase, mitochondrial	4715.1	n/a
NADH2-u10m	NADH dehydrogenase, mitochondrial	374291.1	n/a
NADH2-u10m	NADH dehydrogenase, mitochondrial	4731.1	n/a
NADH2-u10m	NADH dehydrogenase, mitochondrial	55967.1	n/a
NADH2-u10m	NADH dehydrogenase, mitochondrial	4537.1	n/a
NADH2-u10m	NADH dehydrogenase, mitochondrial	4706.1	n/a
NADH2-u10m	NADH dehydrogenase, mitochondrial	4712.2	n/a
NADH2-u10m	NADH dehydrogenase, mitochondrial	4707.1	n/a
NADH2-u10m	NADH dehydrogenase, mitochondrial	4705.1	n/a
NADH2-u10m	NADH dehydrogenase, mitochondrial	4540.1	n/a
NADH2-u10m	NADH dehydrogenase, mitochondrial	4731.2	n/a

Reaction	Putative function	Locus	Ratio
PPA	inorganic diphosphatase	5464.1	n/a
PPAm	inorganic diphosphatase	27068.1	-0.106
PPAm	inorganic diphosphatase	27068.2	n/a
PPAm	inorganic diphosphatase	27068.4	n/a
PPAm	inorganic diphosphatase	27068.3	n/a