

**Title: Stimulated Leaf Dark Respiration in Tomato in an Elevated Carbon Dioxide Atmosphere**

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**Supplementary Table S1.** The Affymetrix probe ID, annotation and treatment response (%) of transcripts whose abundance was significantly altered in tomato by grown at elevated CO<sub>2</sub> concentration (800 μmol mol<sup>-1</sup>) compared to ambient CO<sub>2</sub> concentration (380 μmol mol<sup>-1</sup>).

<b>Affymetrix ID</b>	<b>Annotation</b>	<b>%</b>	<b>p</b>
<b>Glycolysis</b>			
Les.4797.1.S1_at	phosphoglucose isomerase 1	-15.93	0.0238
LesAffx.51723. 1.S1_at	6-phosphofructokinase	58.72	0.0304
Les.3174.1.S1_at	fructose-bisphosphate aldolase, class I	73.49	0.0268
LesAffx.56363. 1.S1_at	triose phosphate isomerase	69.8	0.0319
Les.186.1.S1_at	glyceraldehyde-3-phosphate dehydrogenase	75.21	0.0497
Les.4336.3.S1_at	phosphoglycerate kinase	81.62	0.02
Les.303.1.S1_at	bifunctional enolase2	43.56	0.026
Les.3932.1.S1_at	bifunctional enolase2	40.71	0.0199
Les.3932.2.S1_at	bifunctional enolase2	18.68	0.0352
Les.3932.3.S1_at	bifunctional enolase2	-35.29	0.0106
Les.5649.1.S1_at	plastidial pyruvate kinase 3	50.79	0.0331
<b>tricarboxylic acid ( TCA ) cycle</b>			
Les.3167.1.S1_at	pyruvate dehydrogenase complex E1 alpha subunit	51.61	0.0197

Les.4801.1.S1_at	pyruvate dehydrogenase complex	18.57	0.0451
Les.502.1.S1_at	citrate synthase 2	39.59	0.042
Les.502.2.S1_at	citrate synthase 3	40.68	0.0415
Les.2975.2.S1_at	aconitate hydratase 2	180.72	0.0004
Les.461.1.S1_at	isocitrate dehydrogenase (NAD <sup>+</sup> )	44.11	0.0114
Les.2541.2.S1_at	$\alpha$ -oxoglutarate dehydrogenase E1 component	33.91	0.0103
Les.4961.1.S1_at	$\alpha$ -oxoglutarate dehydrogenase complex 1	47.13	0.0189
Les.5871.1.S1_at	succinate dehydrogenase (ubiquinone) flavoprotein subunit 1	67.44	0.0001
Les.5871.2.S1_at	succinate dehydrogenase (ubiquinone) flavoprotein subunit 1	67.66	0.0138
Les.2307.1.S1_at	succinate dehydrogenase (ubiquinone) flavoprotein subunit 2	45.58	0.0011
Les.5148.1.S1_at	fumarate hydratase, class II	18.87	0.0364
Les.3378.1.S1_at	malate dehydrogenase	24.2	0.0349
Les.2758.1.S1_at	ATP-citrate lyase	45.29	0.0393

#### **mitochondrial electron transport chain (miETC)**

LesAffx.11839.1.S1_at	NADH dehydrogenase I subunit 3	-37.12	0.0003
LesAffx.21457.1.S1_at	NADH dehydrogenase Fe-S protein 4	50.58	0.0093
LesAffx.892.1.S1_at	NADH dehydrogenase Fe-S protein 7	59.5	0.0003
Les.5772.1.S1_at	NADH dehydrogenase 1 alpha sub complex 1	28.15	0.0396
Les.3026.1.S1_at	NADH dehydrogenase 1 alpha sub complex 2	39.02	0.0016
Les.3102.1.S1_at	NADH dehydrogenase (ubiquinone) 1 alpha/beta sub complex 1	42.12	0.0003

Les.5871.1.S1_at	succinate dehydrogenase (ubiquinone) flavoprotein subunit 1	67.44	0.0002
Les.5817.2.S1_at	succinate dehydrogenase (ubiquinone) flavoprotein subunit 1	67.66	0.0358
Les.2307.1.S1_at	succinate dehydrogenase (ubiquinone) flavoprotein subunit 2	45.58	0.0011
Les.4223.1.S1_at	alternative oxidase 1b	245.29	0.0003
Les.4222.1.S1_at	alternative oxidase 1b	187.7	0.0002
Les.4337.1.S1_at	alternative oxidase 1c	14.73	0.0337
Les.4328.1.S1_at	alternative oxidase 2	69.59	0.0019
Les.3447.2.S1_at	ubiquinol-cytochrome <i>c</i> reductase hinge protein	70.54	0.0497
Les.4516.1.S1_at	ubiquinol-cytochrome <i>c</i> reductase iron-sulfur subunit	32.89	0.016
Les.4931.1.S1_at	ubiquinol-cytochrome <i>c</i> reductase cytochrome <i>c</i> 1 subunit	-18.34	0.0241
Les.4271.1.S1_at	cytochrome <i>c</i> oxidase subunit 1	82.72	0.0001
LesAffx.64305.1.S1_at	cytochrome <i>c</i> oxidase subunit 6b-1 like	54.94	0.0132
Les.199.2.S1_at	cytochrome <i>c</i> oxidase subunit 6b-1 like	13.78	0.0465
Les.2873.1.S1_at	cytochrome <i>c</i> oxidase subunit 5b-2	243.14	0.0016
Les.5834.1.S1_at	ATP synthase CF1 alpha chain	-44.26	0.0004
Les.3196.1.S1_at	ATP synthase subunit beta-2	53.05	0.0006
LesAffx.53546.1.S1_at	ATP synthase subunit O	49.84	0.0003
Les.4283.1.S1_at	ATP synthase subunit delta	38.82	0.0002
LesAffx.29304.1.S1_at	ATP synthase subunit epsilon	69.33	0.0344
Les.3691.1.S1_at	UCP protein	83.97	0.0014