

**Table S2: Full list of upregulated genes (fold change  $\geq 1.5$ ) in response to 20  $\mu\text{g/ml}$  LL-37 compared to non-treated *P. aeruginosa* PAO1**

<b>PA number</b>	<b>Gene name</b>	<b>Function class</b>	<b>Fold change</b>
PA0035	<i>trpA</i>	Amino acid biosynthesis and metabolism	1.5
PA0050		Hypothetical, unclassified, unknown	2.5
PA0051	<i>phzH</i>	Putative enzymes	1.6
PA0059	<i>osmC</i>	Adaptation, Protection	1.5
PA0062		Hypothetical, unclassified, unknown	1.6
PA0074	<i>ppkA</i>	Adaptation, Protection; Translation, post-translational modification, degradation; Protein secretion/export apparatus	1.5
PA0088		Protein secretion/export apparatus	1.6
PA0090		Translation, post-translational modification, degradation; Chaperones & heat shock proteins; Protein secretion/export apparatus	1.9
PA0091		Protein secretion/export apparatus	1.9
PA0098		Hypothetical, unclassified, unknown	1.6
PA0099		Hypothetical, unclassified, unknown	1.6
PA0102		Central intermediary metabolism	2.0
PA0103		Membrane proteins; Transport of small molecules	2.0
PA0122		Adaptation, Protection	1.8
PA0141		Hypothetical, unclassified, unknown	1.5
PA0169		Motility & Attachment	1.8
PA0175		Transcriptional regulators; Adaptation, Protection; Chemotaxis	1.6
PA0176		Adaptation, Protection; Chemotaxis	1.5
PA0177		Adaptation, Protection; Chemotaxis	1.8

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<b>PA0187</b>		Hypothetical, unclassified, unknown	2.6
<b>PA0269</b>		Hypothetical, unclassified, unknown	1.7
<b>PA0320</b>		Hypothetical, unclassified, unknown	7.2
<b>PA0327</b>		Hypothetical, unclassified, unknown	1.8
<b>PA0429</b>		Hypothetical, unclassified, unknown	1.6
<b>PA0430</b>	<i>metF</i>	Amino acid biosynthesis and metabolism; Central intermediary metabolism	2.0
<b>PA0431</b>		Hypothetical, unclassified, unknown	1.9
<b>PA0460</b>		Hypothetical, unclassified, unknown	1.5
<b>PA0506</b>		Putative enzymes	1.6
<b>PA0546</b>	<i>metK</i>	Amino acid biosynthesis and metabolism; Central intermediary metabolism	3.2
<b>PA0547</b>		Transcriptional regulators	3.1
<b>PA0589</b>		Energy metabolism	1.5
<b>PA0635</b>		Related to phage, transposon, or plasmid	1.5
<b>PA0744</b>		Putative enzymes	1.6
<b>PA0779</b>		Putative enzymes	1.9
<b>PA0793</b>		Hypothetical, unclassified, unknown	1.9
<b>PA0795</b>	<i>prpC</i>	Central intermediary metabolism; Carbon compound catabolism	1.9
<b>PA0796</b>	<i>prpB</i>	Fatty acid and phospholipid metabolism; Central intermediary metabolism; Carbon compound catabolism	2.5
<b>PA0852</b>	<i>cbpD</i>	Secreted Factors (toxins, enzymes, alginate)	1.6
<b>PA0853</b>		Putative enzymes	1.5
<b>PA0866</b>	<i>aroP2</i>	Transport of small molecules	1.7
<b>PA0887</b>	<i>acsA</i>	Carbon compound catabolism; Central intermediary metabolism	3.1
<b>PA0938</b>		Hypothetical, unclassified, unknown	1.5

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<b>PA0996</b>	<i>pqsA</i>	Biosynthesis of cofactors, prosthetic groups and carriers	2.1
<b>PA0997</b>	<i>pqsB</i>	Biosynthesis of cofactors, prosthetic groups and carriers	1.9
<b>PA0998</b>	<i>pqsC</i>	Biosynthesis of cofactors, prosthetic groups and carriers	1.6
<b>PA0999</b>	<i>pqsD</i>	Biosynthesis of cofactors, prosthetic groups and carriers	1.7
<b>PA1000</b>	<i>pqsE</i>	Biosynthesis of cofactors, prosthetic groups and carriers	2.1
<b>PA1001</b>	<i>phnA</i>	Adaptation, Protection	2.0
<b>PA1002</b>	<i>phnB</i>	Amino acid biosynthesis and metabolism; Adaptation, Protection	2.2
<b>PA1070</b>	<i>braG</i>	Transport of small molecules	1.8
<b>PA1115</b>		Membrane proteins	2.2
<b>PA1119</b>		Membrane proteins; Cell wall / LPS / capsule	1.5
<b>PA1130</b>	<i>rhIC</i>	Cell wall / LPS / capsule; Adaptation, Protection	2.2
<b>PA1168</b>		Hypothetical, unclassified, unknown	8.0
<b>PA1169</b>		Putative enzymes	4.7
<b>PA1173</b>	<i>napB</i>	Energy metabolism	1.8
<b>PA1175</b>	<i>napD</i>	Energy metabolism	2.0
<b>PA1176</b>	<i>napF</i>	Energy metabolism	1.5
<b>PA1216</b>		Hypothetical, unclassified, unknown	2.0
<b>PA1217</b>		Amino acid biosynthesis and metabolism	1.8
<b>PA1323</b>		Hypothetical, unclassified, unknown	1.5
<b>PA1471</b>		Hypothetical, unclassified, unknown	1.7
<b>PA1478</b>		Hypothetical, unclassified, unknown	2.0
<b>PA1480</b>	<i>ccmF</i>	Energy metabolism	1.6
<b>PA1494</b>		Hypothetical, unclassified, unknown	1.5

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<b>PA1550</b>		Hypothetical, unclassified, unknown	2.3
<b>PA1551</b>		Energy metabolism	2.0
<b>PA1556</b>		Energy metabolism; Energy metabolism	1.7
<b>PA1559</b>		Hypothetical, unclassified, unknown	7.9
<b>PA1560</b>		Hypothetical, unclassified, unknown	3.4
<b>PA1592</b>		Hypothetical, unclassified, unknown	1.5
<b>PA1657</b>		Hypothetical, unclassified, unknown	3.5
<b>PA1658</b>		Hypothetical, unclassified, unknown	2.8
<b>PA1659</b>		Hypothetical, unclassified, unknown	2.3
<b>PA1662</b>		Putative enzymes	1.7
<b>PA1664</b>		Hypothetical, unclassified, unknown	4.1
<b>PA1665</b>		Hypothetical, unclassified, unknown	2.3
<b>PA1666</b>		Hypothetical, unclassified, unknown	1.7
<b>PA1667</b>		Hypothetical, unclassified, unknown	2.3
<b>PA1668</b>		Hypothetical, unclassified, unknown	1.5
<b>PA1760</b>		Transcriptional regulators	1.5
<b>PA1797</b>		Hypothetical, unclassified, unknown	2.9
<b>PA1812</b>	<i>mltD</i>	Amino acid biosynthesis and metabolism; Cell wall / LPS / capsule	1.7
<b>PA1852</b>		Hypothetical, unclassified, unknown	2.0
<b>PA1869</b>		Fatty acid and phospholipid metabolism	2.5
<b>PA1871</b>	<i>lasA</i>	Secreted Factors (toxins, enzymes, alginate); Translation, post-translational modification, degradation	1.8
<b>PA1887</b>		Hypothetical, unclassified, unknown	1.5
<b>PA1888</b>		Hypothetical, unclassified, unknown	1.7
<b>PA1894</b>		Hypothetical, unclassified, unknown	1.6
<b>PA1895</b>		Membrane proteins	1.5

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<b>PA1901</b>	<i>phzC2</i>	Secreted Factors (toxins, enzymes, alginate)	4.7
<b>PA1902</b>	<i>phzD2</i>	Secreted Factors (toxins, enzymes, alginate)	5.8
<b>PA1903</b>	<i>phzE2</i>	Secreted Factors (toxins, enzymes, alginate)	6.1
<b>PA1904</b>	<i>phzF2</i>	Secreted Factors (toxins, enzymes, alginate)	6.0
<b>PA1905</b>	<i>phzG2</i>	Secreted Factors (toxins, enzymes, alginate)	6.3
<b>PA1930</b>		Adaptation, Protection; Chemotaxis	1.5
<b>PA1969</b>		Hypothetical, unclassified, unknown	1.6
<b>PA2003</b>	<i>bdhA</i>	Carbon compound catabolism	1.7
<b>PA2011</b>	<i>gnyL</i>	Carbon compound catabolism	1.6
<b>PA2012</b>	<i>gnyA</i>	Carbon compound catabolism	3.5
<b>PA2013</b>	<i>gnyH</i>	Carbon compound catabolism	4.0
<b>PA2014</b>	<i>gnyB</i>	Carbon compound catabolism	3.8
<b>PA2015</b>	<i>gnyD</i>	Carbon compound catabolism	3.1
<b>PA2016</b>	<i>gnyR</i>	Transcriptional regulators	3.6
<b>PA2030</b>		Hypothetical, unclassified, unknown	2.5
<b>PA2031</b>		Hypothetical, unclassified, unknown	2.4
<b>PA2066</b>		Hypothetical, unclassified, unknown	2.1
<b>PA2067</b>		Putative enzymes	2.3
<b>PA2068</b>		Membrane proteins; Transport of small molecules	6.1
<b>PA2069</b>		Putative enzymes	6.8
<b>PA2109</b>		Hypothetical, unclassified, unknown	1.7
<b>PA2110</b>		Hypothetical, unclassified, unknown	1.6
<b>PA2112</b>		Hypothetical, unclassified, unknown	1.7
<b>PA2166</b>		Hypothetical, unclassified, unknown	1.7
<b>PA2171</b>		Hypothetical, unclassified, unknown	2.0
<b>PA2193</b>	<i>hcnA</i>	Central intermediary metabolism	2.4

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<b>PA2194</b>	<i>hcnB</i>	Central intermediary metabolism	2.6
<b>PA2195</b>	<i>hcnC</i>	Central intermediary metabolism	2.1
<b>PA2274</b>		Hypothetical, unclassified, unknown	1.9
<b>PA2290</b>	<i>gcd</i>	Carbon compound catabolism; Energy metabolism	1.6
<b>PA2300</b>	<i>chiC</i>	Carbon compound catabolism	5.0
<b>PA2302</b>		Secreted Factors (toxins, enzymes, alginate); Putative enzymes	1.7
<b>PA2303</b>		Secreted Factors (toxins, enzymes, alginate)	2.0
<b>PA2358</b>		Hypothetical, unclassified, unknown	5.2
<b>PA2366</b>		Hypothetical, unclassified, unknown	2.1
<b>PA2367</b>		Hypothetical, unclassified, unknown	2.1
<b>PA2368</b>		Hypothetical, unclassified, unknown	2.3
<b>PA2433</b>		Hypothetical, unclassified, unknown	2.3
<b>PA2441</b>		Hypothetical, unclassified, unknown	1.6
<b>PA2485</b>		Hypothetical, unclassified, unknown	1.6
<b>PA2486</b>		Hypothetical, unclassified, unknown	1.7
<b>PA2552</b>		Putative enzymes	1.9
<b>PA2553</b>		Putative enzymes	1.9
<b>PA2554</b>		Putative enzymes	2.3
<b>PA2555</b>		Putative enzymes	1.6
<b>PA2557</b>		Fatty acid and phospholipid metabolism	3.0
<b>PA2562</b>		Hypothetical, unclassified, unknown	1.9
<b>PA2566</b>		Hypothetical, unclassified, unknown	2.0
<b>PA2570</b>	<i>pa1L</i>	Adaptation, Protection; Motility & Attachment; Cell wall / LPS / capsule	1.6
<b>PA2572</b>		Transcriptional regulators; Two-component regulatory systems	1.5
<b>PA2588</b>		Transcriptional regulators	1.5

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<b>PA2607</b>		Hypothetical, unclassified, unknown	1.5
<b>PA2642</b>	<i>nuoG</i>	Energy metabolism	1.6
<b>PA2643</b>	<i>nuoH</i>	Energy metabolism	1.6
<b>PA2646</b>	<i>nuoK</i>	Energy metabolism	1.5
<b>PA2647</b>	<i>nuoL</i>	Energy metabolism	1.6
<b>PA2655</b>		Hypothetical, unclassified, unknown	1.6
<b>PA2717</b>	<i>cpo</i>	Central intermediary metabolism	1.5
<b>PA2754</b>		Hypothetical, unclassified, unknown	1.7
<b>PA2788</b>		Adaptation, Protection; Chemotaxis	2.1
<b>PA2895</b>		Hypothetical, unclassified, unknown	1.6
<b>PA3028</b>	<i>moeA2</i>	Biosynthesis of cofactors, prosthetic groups and carriers	1.5
<b>PA3038</b>		Transport of small molecules	2.2
<b>PA3049</b>	<i>rmf</i>	Translation, post-translational modification, degradation	1.7
<b>PA3126</b>	<i>ibpA</i>	Chaperones & heat shock proteins	2.1
<b>PA3149</b>	<i>wbpH</i>	Putative enzymes; Cell wall / LPS / capsule	1.6
<b>PA3213</b>		Hypothetical, unclassified, unknown	1.6
<b>PA3214</b>		Hypothetical, unclassified, unknown	1.5
<b>PA3234</b>		Membrane proteins; Transport of small molecules	1.8
<b>PA3235</b>		Membrane proteins	1.6
<b>PA3361</b>	<i>lecB</i>	Motility & Attachment	5.9
<b>PA3478</b>	<i>rhIB</i>	Secreted Factors (toxins, enzymes, alginate)	2.0
<b>PA3479</b>	<i>rhIA</i>	Secreted Factors (toxins, enzymes, alginate)	1.5
<b>PA3520</b>		Hypothetical, unclassified, unknown	1.6
<b>PA3530</b>		Hypothetical, unclassified, unknown	1.9
<b>PA3552</b>	<i>arnB</i>	Cell wall / LPS / capsule; Antibiotic resistance and susceptibility; Adaptation, Protection	1.6

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<b>PA3553</b>	<i>arnC</i>	Adaptation, Protection; Putative enzymes; Cell wall / LPS / capsule; Antibiotic resistance and susceptibility	1.6
<b>PA3555</b>	<i>arnD</i>	Adaptation, Protection; Antibiotic resistance and susceptibility; Cell wall / LPS / capsule	1.5
<b>PA3556</b>	<i>arnT</i>	Adaptation, Protection; Membrane proteins; Cell wall / LPS / capsule	2.0
<b>PA3557</b>	<i>arnE</i>	Adaptation, Protection; Cell wall / LPS / capsule; Membrane proteins	2.0
<b>PA3558</b>	<i>arnF</i>	Membrane proteins; Adaptation, Protection; Cell wall / LPS / capsule	2.2
<b>PA3559</b>	<i>ugd</i>	Putative enzymes	2.8
<b>PA3569</b>	<i>mmsB</i>	Carbon compound catabolism	2.3
<b>PA3570</b>	<i>mmsA</i>	Amino acid biosynthesis and metabolism; Carbon compound catabolism	2.6
<b>PA3642</b>	<i>rnhB</i>	DNA replication, recombination, modification and repair	1.5
<b>PA3643</b>	<i>lpxB</i>	Cell wall / LPS / capsule	1.5
<b>PA3659</b>		Putative enzymes	1.6
<b>PA3661</b>		Hypothetical, unclassified, unknown	3.5
<b>PA3676</b>		Membrane proteins; Transport of small molecules	1.6
<b>PA3677</b>		Transport of small molecules	1.7
<b>PA3678</b>		Transcriptional regulators	1.7
<b>PA3719</b>		Antibiotic resistance and susceptibility	2.0
<b>PA3720</b>		Hypothetical, unclassified, unknown	2.6
<b>PA3724</b>	<i>lasB</i>	Secreted Factors (toxins, enzymes, alginate); Translation, post-translational modification, degradation	2.1
<b>PA3733</b>		Hypothetical, unclassified, unknown	1.5
<b>PA3734</b>		Hypothetical, unclassified, unknown	1.8
<b>PA3784</b>		Hypothetical, unclassified, unknown	2.3

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<b>PA3785</b>		Hypothetical, unclassified, unknown	2.5
<b>PA3786</b>		Hypothetical, unclassified, unknown	1.9
<b>PA3809</b>	<i>fdx2</i>	Energy metabolism	1.6
<b>PA3810</b>	<i>hscA</i>	Chaperones & heat shock proteins	1.5
<b>PA3901</b>	<i>fecA</i>	Membrane proteins; Transport of small molecules	2.4
<b>PA3905</b>		Hypothetical, unclassified, unknown	2.0
<b>PA3906</b>		Hypothetical, unclassified, unknown	2.1
<b>PA3907</b>		Hypothetical, unclassified, unknown	1.7
<b>PA3908</b>		Hypothetical, unclassified, unknown	1.9
<b>PA3919</b>		Hypothetical, unclassified, unknown	1.7
<b>PA3981</b>		Hypothetical, unclassified, unknown	1.8
<b>PA3982</b>		Hypothetical, unclassified, unknown	1.6
<b>PA3996</b>	<i>lis</i>	Biosynthesis of cofactors, prosthetic groups and carriers	2.0
<b>PA4067</b>	<i>oprG</i>	Membrane proteins	1.6
<b>PA4129</b>		Hypothetical, unclassified, unknown	3.1
<b>PA4130</b>		Central intermediary metabolism	2.3
<b>PA4131</b>		Putative enzymes	2.5
<b>PA4132</b>		Hypothetical, unclassified, unknown	2.9
<b>PA4133</b>		Energy metabolism	3.7
<b>PA4134</b>		Hypothetical, unclassified, unknown	5.4
<b>PA4139</b>		Hypothetical, unclassified, unknown	9.6
<b>PA4140</b>		Hypothetical, unclassified, unknown	2.6
<b>PA4141</b>		Hypothetical, unclassified, unknown	3.2
<b>PA4142</b>		Protein secretion/export apparatus	1.5
<b>PA4205</b>	<i>mexG</i>	Membrane proteins	10.2
<b>PA4206</b>	<i>mexH</i>	Transport of small molecules	4.9

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<b>PA4207</b>	<i>mexI</i>	Membrane proteins; Transport of small molecules	2.5
<b>PA4208</b>	<i>opmD</i>	Membrane proteins; Transport of small molecules	3.1
<b>PA4209</b>	<i>phzM</i>	Putative enzymes	5.3
<b>PA4210</b>	<i>phzA1</i>	Secreted Factors (toxins, enzymes, alginate)	7.8
<b>PA4211</b>	<i>phzB1</i>	Secreted Factors (toxins, enzymes, alginate)	4.5
<b>PA4217</b>	<i>phzS</i>	Putative enzymes	5.3
<b>PA4221</b>	<i>fptA</i>	Transport of small molecules	1.7
<b>PA4228</b>	<i>pchD</i>	Secreted Factors (toxins, enzymes, alginate); Transport of small molecules	1.6
<b>PA4229</b>	<i>pchC</i>	Secreted Factors (toxins, enzymes, alginate); Transport of small molecules	1.7
<b>PA4230</b>	<i>pchB</i>	Secreted Factors (toxins, enzymes, alginate); Transport of small molecules	1.8
<b>PA4231</b>	<i>pchA</i>	Secreted Factors (toxins, enzymes, alginate); Transport of small molecules	1.5
<b>PA4290</b>		Adaptation, Protection; Chemotaxis	1.6
<b>PA4306</b>		Motility & Attachment	2.0
<b>PA4359</b>		Hypothetical, unclassified, unknown	1.6
<b>PA4428</b>	<i>sspA</i>	Adaptation, Protection	1.6
<b>PA4430</b>		Energy metabolism	1.5
<b>PA4489</b>		Hypothetical, unclassified, unknown	2.0
<b>PA4490</b>		Hypothetical, unclassified, unknown	1.5
<b>PA4515</b>		Hypothetical, unclassified, unknown	2.7
<b>PA4525</b>	<i>pilA</i>	Motility & Attachment	1.6
<b>PA4573</b>		Hypothetical, unclassified, unknown	1.5
<b>PA4597</b>	<i>oprJ</i>	Membrane proteins; Antibiotic resistance and susceptibility; Transport of small molecules	3.9
<b>PA4598</b>	<i>mexD</i>	Transport of small molecules; Membrane proteins; Antibiotic resistance and susceptibility	4.4

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<b>PA4599</b>	<i>mexC</i>	Transport of small molecules; Antibiotic resistance and susceptibility	9.1
<b>PA4600</b>	<i>nfxB</i>	Transcriptional regulators	1.9
<b>PA4611</b>		Hypothetical, unclassified, unknown	1.6
<b>PA4624</b>		Cell wall / LPS / capsule	1.9
<b>PA4625</b>		Secreted Factors (toxins, enzymes, alginate); Cell wall / LPS / capsule	3.0
<b>PA4675</b>		Transport of small molecules	1.9
<b>PA4700</b>	<i>mrcB</i>	Cell wall / LPS / capsule	1.5
<b>PA4757</b>		Membrane proteins	1.8
<b>PA4758</b>	<i>carA</i>	Amino acid biosynthesis and metabolism; Nucleotide biosynthesis and metabolism	1.6
<b>PA4773</b>		Hypothetical, unclassified, unknown	4.9
<b>PA4774</b>		Hypothetical, unclassified, unknown	3.2
<b>PA4775</b>		Hypothetical, unclassified, unknown	2.2
<b>PA4776</b>	<i>pmrA</i>	Two-component regulatory systems	1.9
<b>PA4782</b>		Hypothetical, unclassified, unknown	1.5
<b>PA4865</b>	<i>ureA</i>	Central intermediary metabolism	2.3
<b>PA4925</b>		Hypothetical, unclassified, unknown	1.7
<b>PA4946</b>	<i>mutL</i>	DNA replication, recombination, modification and repair	1.7
<b>PA4953</b>	<i>motB</i>	Membrane proteins; Adaptation, Protection; Chemotaxis	1.5
<b>PA4961</b>		Membrane proteins	1.7
<b>PA4997</b>	<i>msbA</i>	Fatty acid and phospholipid metabolism; Cell wall / LPS / capsule; Transport of small molecules	1.7
<b>PA5070</b>	<i>tatC</i>	Membrane proteins; Transport of small molecules	1.6
<b>PA5182</b>		Membrane proteins	2.2
<b>PA5183</b>		Membrane proteins	2.7

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<b>PA5217</b>		Transport of small molecules	2.0
<b>PA5220</b>		Hypothetical, unclassified, unknown	2.0
<b>PA5278</b>	<i>dapF</i>	Amino acid biosynthesis and metabolism	1.9
<b>PA5314</b>		Hypothetical, unclassified, unknown	1.6
<b>PA5323</b>	<i>argB</i>	Amino acid biosynthesis and metabolism	1.5
<b>PA5338</b>	<i>spoT</i>	Nucleotide biosynthesis and metabolism; Adaptation, Protection	1.5
<b>PA5339</b>		Hypothetical, unclassified, unknown	2.7
<b>PA5340</b>		Hypothetical, unclassified, unknown	1.6
<b>PA5362</b>		Hypothetical, unclassified, unknown	1.5
<b>PA5445</b>		Putative enzymes	1.9
<b>PA5473</b>		Membrane proteins	1.5
<b>PA5475</b>		Hypothetical, unclassified, unknown	1.7
<b>PA5496</b>		Nucleotide biosynthesis and metabolism	1.8
<b>PA5497</b>		Nucleotide biosynthesis and metabolism	1.9
<b>PA5526</b>		Hypothetical, unclassified, unknown	1.6
<b>PA5531</b>	<i>tonB</i>	Transport of small molecules	2.0

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