

1 **Table S1:** List of *P. aeruginosa* genes homologous to genes involved in ChoP
 2 biosynthesis, expression or metabolism in other microorganisms.

Gene locus *	Gene name	Protein	Gene homolog
PA2372	-	hypothetical protein PA2372	<i>licA</i>
PA0361	-	probable gamma-glutamyltranspeptidase precursor	<i>licA</i>
PA4745	<i>nusA</i>	transcription elongation factor NusA	<i>licA</i>
PA3858	-	probable amino acid-binding protein	<i>licA</i>
PA1114	-	hypothetical protein PA1114	<i>licA</i>
PA1227	-	hypothetical protein PA1227	<i>licA</i>
PA5317	-	probable binding protein component of ABC dipeptide transporter	<i>licA</i>
PA4929	-	hypothetical protein PA4929	<i>licA</i>
PA3889	-	probable binding protein component of ABC transporter	<i>licB</i>
PA2090	-	hypothetical protein PA2090	<i>licB</i>
PA1060	-	hypothetical protein PA1060	<i>licB</i>
PA1882	-	probable transporter	<i>licB</i>
PA1519	-	probable transporter	<i>licB</i>
PA4719	-	probable transporter	<i>licB</i>
PA5530	-	probable MFS dicarboxylate transporter	<i>licB</i>
PA2735	-	probable restriction-modification system protein	<i>licB</i>
PA2018	-	multidrug efflux protein	<i>licB</i>
PA3358	-	hypothetical protein PA3358	<i>licB</i>
PA2965	<i>fabF1</i>	3-oxoacyl-(acyl carrier protein) synthase II	<i>licB</i>
PA2530	-	hypothetical protein PA2530	<i>licB</i>
PA1784	-	hypothetical protein PA1784	<i>licC</i>
PA0597	-	probable nucleotidyl transferase	<i>licC</i>
PA2023	<i>galU</i>	UTP--glucose-1-phosphate uridylyltransferase	<i>licC</i>
PA1090	-	hypothetical protein PA1090	<i>licC</i>
PA0486	-	predicted kinase	<i>licC</i>
PA5163	<i>rmlA</i>	glucose-1-phosphate thymidyltransferase	<i>licC</i>
PA3649	-	hypothetical protein PA3649	<i>licC</i>
PA2536	-	probable phosphatidate cytidylyltransferase	<i>licD</i>
PA5375	<i>betT1</i>	choline transporter BetT	<i>betT</i>
PA3933	-	probable choline transporter	<i>betT</i>
PA5291	-	probable choline transporter	<i>betT</i>
PA5211	-	hypothetical protein PA5211	<i>betT</i>
PA3579	-	probable carbohydrate kinase	<i>betT</i>
PA0192	-	probable TonB-dependent receptor	<i>betT</i>
PA4072	-	probable amino acid permease	<i>betT</i>
PA0343	-	hypothetical protein PA0343	<i>betT</i>
PA0438	<i>codB</i>	cytosine permease	<i>betT</i>
PA4233	-	probable major facilitator superfamily	<i>betT</i>
PA1693	<i>pscR</i>	type III secretion system protein	<i>betT</i>
PA3341	-	probable transcriptional regulator	<i>betT</i>
PA1446	<i>fliP</i>	flagellar biosynthesis protein FliP	<i>betT</i>
PA1147	-	probable amino acid permease	<i>betT</i>
PA0592	<i>ksgA</i>	dimethyladenosine transferase	<i>pmtA</i>
PA4088	-	aminotransferase	<i>pmtA</i>
PA5063	<i>ubiE</i>	ubiquinone /menaquinone biosynthesis methyltransferase	<i>pmtA</i>
PA0798	<i>pmtA</i>	phospholipid methyltransferase	<i>pmtA</i>
PA0547	-	probable transcriptional regulador	<i>pmtA</i>
PA3171	<i>ubiG</i>	3-demethylubiquinone-9 3-methyltransferase	<i>pmtA</i>
PA3624	<i>pcm</i>	protein-L-isoaspartate O-methyltransferase	<i>pmtA</i>
PA3487	<i>pldA</i>	phospholipase D	<i>pmtA</i>
PA2118	<i>ada</i>	O6-methylguanine-DNA methyltransferase	<i>pmtA</i>
PA4664	<i>hemK</i>	probable methyl transferase	<i>pmtA</i>
PA0412	<i>pilK</i>	methyltransferase PilK	<i>pmtA</i>
PA0774	-	hypothetical protein PA0774	<i>pmtA</i>
PA3164	-	3-phosphoshikimate 1-carboxyvinyltransferase prephenate pehydrogenase	<i>pcs</i>
PA2799	-	hypothetical protein PA2799	<i>pcs</i>
PA3346	-	probable two-component response regulator	<i>pcs</i>
PA3857	<i>pcs</i>	phosphatidylcholine synthase	<i>pcs</i>
PA2541	-	probable CDP-alcohol phosphatidyltransferase	<i>pcs</i>
PA2089	-	hypothetical protein PA2089	<i>pcs</i>
PA0224	-	hypothetical protein PA0224	<i>pcs</i>
PA4517	-	conserved hypothetical protein	<i>pptA</i>

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* Gene locus in PAO1