

Function	Gene reference		KEGG annotation	Description
	Name	Number		
ABC Transporters				
Iron (III) transporter	<i>afuA</i>	LCN16_02557	K02012	substrate-binding protein
		LCN16_03143		
		LCN16_04047		
	<i>afuB</i>	LCN16_02558	K02011	permease protein
		LCN16_03144		
		LCN16_04046		
	<i>afuC</i>	LCN16_02559	K02010	ATP-binding protein
		LCN16_03145		
		LCN16_04045		
Putrescine transporter	<i>potF</i>	LCN16_01614	K11073	substrate-binding protein
	<i>potG</i>	LCN16_01615	K11076	ATP-binding protein
	<i>potH</i>	LCN16_01616	K11075	permease protein
	<i>potI</i>	LCN16_01617	K11074	permease protein
Spermidine/putrescine		LCN16_03709	K02055	substrate-binding protein
		LCN16_04432	K02055	
		LCN16_03706	K02053	permease protein
		LCN16_04429	K02053	
		LCN16_03707	K02054	
		LCN16_04430	K02054	
		LCN16_03708	K02052	
		LCN16_04428	K02052	ATP-binding protein
Iron complex transporter		LCN16_00483	K02016	substrate-binding protein
		LCN16_00935		
		LCN16_01231		
		LCN16_01361		
		LCN16_02183		
		LCN16_03258		
		LCN16_03495		
		LCN16_04075		
		LCN16_00482	K02015	permease protein
		LCN16_01233		
		LCN16_01317		
		LCN16_02182		
		LCN16_03260		

		LCN16_03497		
		LCN16_03498		
		LCN16_04074		
		LCN16_00484	K02013	ATP-binding protein
		LCN16_01234		
		LCN16_01318		
		LCN16_02181		
		LCN16_03259		
		LCN16_03499		
		LCN16_04076		
Manganese/iron	<i>sitA</i>	LCN16_02147	K11604	substrate-binding protein
	<i>sitC</i>	LCN16_02145	K11605	permease protein
	<i>sitD</i>	LCN16_02144	K11606	
	<i>sitB</i>	LCN16_02146	K11607	ATP-binding protein
Electrochemical potential-driven	<i>efeU</i>	LCN16_02958	K07243	high-affinity iron transporter
	<i>efeO</i>	LCN16_02957	K07224	iron uptake system
	<i>efeB</i>	LCN16_02956	K16301	deferrochelataase/peroxidase
Others	<i>feoA</i>	LCN16_04566	K04758	ferrous iron transport protein
	<i>feoB</i>	LCN16_04567	K04759	
	<i>feoC</i>	LCN16_04568	K07490	
Motility and Chemotaxis				
	<i>cheA</i>	LCN16_03016	K03407	two-component system, chemotaxis family, sensor kinase CheA [EC:2.7.13.3]
	<i>cheW</i>	LCN16_03015	K03408	purine-binding chemotaxis protein CheW
	<i>cheR</i>	LCN16_03012	K00575	chemotaxis protein methyltransferase CheR [EC:2.1.1.80]
	<i>cheB</i>	LCN16_03011	K03412	two-component system, chemotaxis family, response regulator CheB [EC:3.1.1.61]
	<i>cheY</i>	LCN16_03010	K03413	two-component system, chemotaxis family, response regulator CheY
	<i>cheZ</i>	LCN16_03009	K03414	chemotaxis protein CheZ
	<i>mcp</i>	LCN16_02979	K03406	Methyl-accepting chemotaxis protein I
	<i>tsr</i>	LCN16_03014	K05874	tsr; methyl-accepting chemotaxis protein I, serine sensor receptor
	<i>tar</i>	LCN16_00083	K05877	tap; methyl-accepting chemotaxis protein IV, peptide sensor receptor
	<i>tap</i>	LCN16_03013	K05877	tap; methyl-accepting chemotaxis protein IV, peptide sensor receptor
Adhesion				
	<i>fhaB</i>	LCN16_04167	K1525	filamentous hemagglutinin
	<i>fhaB</i>	LCN16_04346	K1526	filamentous hemagglutinin
Plant polymer degradation				
		LCN16_00161	K01179	endoglucanase [EC:3.2.1.4]

	<i>uxaA</i>	LCN16_04263	K01686	mannonate dehydratase
	<i>uxaC</i>	LCN16_04264	K00040	fructuronate reductase
Plant growth promotion				
Nitrogen metabolism	<i>glnL</i>	LCN16_04783		two-component regulatory system
	<i>glnG</i>	LCN16_04784		two-component regulatory system
	<i>narX</i>	LCN16_02937		nitrogen respiration
	<i>narL</i>	LCN16_02938		nitrogen respiration
	<i>narQ</i>	LCN16_03562		nitrate respiration
	<i>narP</i>	LCN16_03563		nitrate respiration
Siderophore	<i>entC</i>	LCN16_03494	K02364	enterobactin synthetase component F
	<i>entE</i>	LCN16_03493	K02363	2,3-dihydro-2,3-dihydroxybenzoate-AMP ligase
	<i>entA</i>	LCN16_03491	K02361	2,3-dihydro-2,3-dihydroxybenzoate dehydrogenase
	<i>entF</i>	LCN16_00890	K02364	enterobactin synthetase component F
		LCN16_03500		
	<i>exbD</i>	LCN16_00528	K03558	Biopolymer transport protein ExbD
		LCN16_04176	K03559	Biopolymer transport protein ExbD
	<i>exbB</i>	LCN16_00531	K03561	Biopolymer transport protein ExbB
		LCN16_04177	K03562	Biopolymer transport protein ExbB
	<i>bfr</i>	LCN16_04493	K03594	bacterioferritin
	<i>menF</i>	LCN16_03345	K02552	menaquinone-specific isochorismate synthase
<i>pchB</i>	LCN16_03570	K04782	isochorismate pyruvate lyase	
IAA	<i>ipdC</i>	LCN16_00911	K04103	indole-3-pyruvate decarboxylase
		LCN16_03478		
	<i>budA</i>	LCN16_03505	K01575	Acetolactate decarboxylase
	<i>budB</i>	LCN16_03506	K01652	Acetolactate synthase, catabolic
	<i>budC</i>	LCN16_02073	K18009	(S,S)-butanediol dehydrogenase (acetoin reductase)
Aromatic Degradation	<i>aaeA</i>	LCN16_04337	K15548	p-hydroxybenzoic acid efflux pump
	<i>aaeB</i>	LCN16_04336	K03468	p-hydroxybenzoic acid efflux pump
	<i>catA</i>	LCN16_03045	K03381	catechol 1,2-dioxygenase
	<i>catB</i>	LCN16_03043	K01856	muconate D-isomerase
	<i>catC</i>	LCN16_03044	K03464	muconolactone D-isomerase
	<i>benA</i>	LCN16_03046	K05549	benzoate/toluato 1,2-oxygenase alpha subunit
	<i>benB</i>	LCN16_03047	K05550	benzoate/toluato 1,2-oxygenase beta subunit
	<i>benC</i>	LCN16_03048	K05784	benzoate/toluato 1,2-oxygenase reductase subunit
	<i>benD</i>	LCN16_03049	K05783	dihydroxycyclohexadiene carboxylate dehydrogenase
	<i>pcaD</i>	LCN16_03042	K01055	3-oxoadipate enol-lactonase
	<i>pcaG</i>	LCN16_02516	K00448	protocatechuate 3,4-dioxygenase alpha subunit
<i>pcaH</i>	LCN16_02515	K00449	protocatechuate 3,4-dioxygenase beta subunit	
<i>pcaB</i>	LCN16_02519	K01857	3-carboxy-cis, cis-muconate cycloisomerase	

	<i>pcaC</i>	LCN16_01415	K01607	4-carboxymuconolactone decarboxylase
	<i>pcaC</i>	LCN16_02518	K01607	4-carboxymuconolactone decarboxylase
	<i>pobA</i>	LCN16_02520	K00481	p-hydroxybenzoate 3-monoxygenase
	<i>hpaB</i>	LCN16_00566	K00483	4-hydroxyphenylacetate 3-monoxygenase
	<i>hpaC</i>	LCN16_00567	K00484	flavin reductase
	<i>hpaD</i>	LCN16_00560	K00455	3,4-dihydroxyphenylacetate 2,3-dioxygenase
	<i>hpaE</i>	LCN16_00559	K00151	5-carboxymethyl-2-hydroxymuconic-semialdehyde dehydrogenase
	<i>hpaF</i>	LCN16_00561	K01826	5-carboxymethyl-2-hydroxymuconate isomerase
	<i>hpaG</i>	LCN16_00557	K05921	2-hydroxyhepta-2,4-diene-1,7-dioate isomerase
	<i>hapG</i>	LCN16_00558	K05921	2-hydroxyhepta-2,4-diene-1,7-dioate isomerase
Secretion system proteins				
T1SS	<i>tolC</i>	LCN16_04212	K12340	outer membrane protein
	<i>hasD</i>	LCN16_01553	K12536	bacterial exporter for protease/lipase
	<i>hasE</i>	LCN16_01554	K12537	protease secretion system
	<i>hasF</i>	LCN16_01555	K12538	protease secretion system
T2SS	<i>gspS</i>	LCN16_03133	K02465	general secretion pathway protein S
T5SS	<i>ssp</i>	LCN16_04654	K12685	subtilase-type serine protease
	<i>apeE</i>	LCN16_00070	K12686	outer membrane lipase/esterase
Sec-dependent	<i>secA</i>	LCN16_00698	K03070	preprotein translocase subunit
	<i>secB</i>	LCN16_04731	K03071	preprotein translocase subunit
	<i>secD</i>	LCN16_00975	K03072	preprotein translocase subunit
	<i>secE</i>	LCN16_00287	K03073	preprotein translocase subunit
	<i>secF</i>	LCN16_00976	K03074	preprotein translocase subunit
	<i>secG</i>	LCN16_00423	K03075	preprotein translocase subunit
	<i>secM</i>	LCN16_00697	K13301	secretion monitor
	<i>secY</i>	LCN16_04471	K03076	preprotein translocase subunit
	<i>ffh</i>	LCN16_00786	K03106	
	<i>ftsY</i>	LCN16_00237	K03110	
	<i>yajC</i>	LCN16_00974	K03210	preprotein translocase subunit
	<i>yidC</i>	LCN16_00044	K03217	
Tat-independent	<i>tatA</i>	LCN16_00270	K03116	sec-independent protein translocase protein
	<i>tatA</i>	LCN16_01113	K03116	sec-independent protein translocase protein
	<i>tatB</i>	LCN16_00271	K03117	sec-independent protein translocase protein
	<i>tatC</i>	LCN16_00272	K03118	sec-independent protein translocase protein
Antimicrobial Compounds				
	<i>hpmA</i>	LCN16_04426	K11016	hemolysin
	<i>hpmB</i>	LCN16_04425	K11017	hemolysin activation/secretion protein
	<i>hlyIII</i>	LCN16_04002	K11068	hemolysin III
	<i>plcC</i>	LCN16_04159	K01114	phospholipase C

	<i>tlh</i>	LCN16_04200	K11018	thermostable hemolysin
		LCN16_00223	K01406	serralysin
		LCN16_02109		serralysin
		LCN16_03865		serralysin
	<i>prnA</i>	LCN16_00326		pyrrolnitrin
	<i>prnB</i>	LCN16_00327		
	<i>prnD</i>	LCN16_00329		
	<i>kanB</i>	LCN16_03985		
	<i>mdtL</i>	LCN16_03987		Chroramphenicol resistance
	<i>ampC</i>	LCN16_02298	K01467	beta-Lactamase classe C
	<i>macA</i>	LCN16_01639	K13888	macrolide-specific efflux system
		LCN16_01870		
		LCN16_03524		
	<i>macB</i>	LCN16_01640	K05685	macrolide transport system ATP-binding/permease
		LCN16_01869		
		LCN16_03525		
	<i>emrA</i>	LCN16_01268	K03543	multidrug efflux system
		LCN16_03848		
	<i>acrA</i>	LCN16_01039	K03585	
		LCN16_02497		
	<i>acrB</i>	LCN16_01038	K18138	
		LCN16_02496		
		LCN16_02547		
	<i>marC</i>	LCN16_02155	K05595	multiple antibiotic resistance
	<i>hcnA</i>	LCN16_01840		Hydrogen cyanide synthase subunit HcnC
	<i>hcnB</i>	LCN16_01841		Hydrogen cyanide synthase subunit HcnA
	<i>hcnC</i>	LCN16_01842		Hydrogen cyanide synthase subunit HcnB
Antifungal activity		LCN16_00148	K01183	chitinase [EC:3.2.1.14]
		LCN16_01150	K01184	chitinase [EC:3.2.1.14]
		LCN16_02767	K01185	chitinase [EC:3.2.1.14]
		LCN16_03549	K01186	chitinase [EC:3.2.1.14]