

Table 2. Identification of *B. burgdorferi* genes

BB#	Identification [Species]	%Sim.							
Amino acid biosynthesis									
<i>Serine family</i>									
BB601	serine OHMTase (glyA) {Ec}	73	BBH20	outer membrane porin (oms28), put {Bb}	74	BB291	flg basal-body rod prt (fliF) {Bb}	100	
Biosynthesis of cofactors, prosthetic groups, and carriers			BBH21	outer membrane porin (oms28), put {Bb}	74	BB293	flg basal-body rod prt (flgC) {Bb}	100	
<i>Folic acid</i>			BBE09	prt p23 {Bb}	93	BB294	flg basal-body rod prt (flgB) {Bb}	100	
BB026	methylenetetrahydrofolate DHase (folD) {Bs}	61	lp25		BB774	flg basal-body rod prt (flgG) {Sc}	68		
			BBB19	outer surface prt C (ospC) {Bb}	100	BB271	flg biosyn prt (fliA) {Bb}	100	
			BBB07	outer surface prt, put {Bb}	45	BB272	flg biosyn prt (fliB) {Bb}	100	
<i>Heme and porphyrin</i>			cp26		BB273	flg biosyn prt (fliR) {Bb}	100		
BB197	protoporphyrinogen oxidase, put {Bs}	56	BBC06	exported prt A (eppA) {Bb}	100	BB274	flg biosyn prt (fliQ) {Bb}	100	
BB656	oxygen-independent coproporphyrinogen III oxidase, put {Bs}	51	BB160	alanine racemase (alr) {Ec}	54	BB275	flg biosyn prt (fliP) {Bb}	100	
			BB582	CPDase, put {Bs}	54	BB276	flg biosyn prt (fliZ) {Bb}	100	
			BB200	D-alanine-D-alanine ligase (ddIA) {Ec}	60	BB277	flg filament 41 kDa core prt (flaA) {Bb}	100	
<i>Menaquinone and ubiquinone</i>			BB100	glutamate racemase (murl) {Ec}	56	BB668	flg filament outer layer prt (fliA) {Bb}	99	
BB314	octaprenyl-diPSase (ispB) {Ec}	57	BB625	N-Acmuramoyl-L-alanine amidase, put {Ef}	53	BB284	flg hook assembly prt (flgD) {Bb}	100	
<i>Pantothenate</i>			BB732	penicillin-BP(pbp-3) {Ng}	52	BB283	flg hook prt (fliE) {Bb}	100	
BB812	pantothenate metabolism flavoprt (dfp) {Ec}	58	BB136	penicillin-BP(pbp-1) {Nm}	52	BB181	flg hook-associated prt (flgK) {Bb}	99	
			BB718	penicillin-BP(pbp-2) {Hi}	52	BB149	flg hook-associated prt 2 (fliD) {Bb}	99	
<i>Pyridoxine</i>			BB303	phospho-N-Acmuramoyl-pentapeptideTase (mraY) {Bb}	100	BB182	flg hook-associated prt 3 (fliG) {Bb}	99	
BB768	pyridoxal kinase (pdxK) {Sc}	47	BB715	rod shape-determining prt (mreB-1) {Ec}	73	BB287	flg hook-basal body complex (fliO) {Bs}	56	
<i>Thiamine</i>			BB716	rod shape-determining prt (mreC) {Bs}	51	BB292	flg hook-basal body complex (fliE) {Bb}	100	
BB621	4-methyl-5-(b-OHethyl)-thiazole monoP biosyn prt (thiJ) {Ec}	58	BB719	rod shape-determining prt (mreB-2) {Hi}	61	BB280	flg motor rotation prt B (motB) {Bb}	100	
<i>Pyridine nucleotides</i>			BB605	serine-type D-Ala-D-Ala CPDase (daca) {Hi}	55	BB281	flg motor rotation prt A (motA) {Bb}	100	
BB522	NH(3)-dep NAD+ Sase {Rc}	65	BB472	UDP-NAG 1-carboxy-vinylTase (murA) {Ec}	59	BB277	flg motor switch prt (fliN) {Bb}	100	
Cell envelope			BB598	UDP-N-Acmuramate DHase (murB) {Bs}	55	BB278	flg motor switch prt (fliM) {Bb}	100	
<i>Membranes, lipoproteins, and porins</i>			BB817	UDP-N-Acmuramate-alanine ligase (murC) {Hi}	54	BB221	flg motor switch prt (fliG-1) {Td}	54	
BB382	basic membrane prt B (bmpB) {Bb}	100	BB585	UDP-N-Acmuramoylalanine-D-glutamate ligase (murD) {Bs}	52	BB290	flg motor switch prt (fliG-2) {Bb}	100	
BB383	basic membrane prt A (bmpA) {Bb}	100	BB201	UDP-N-Acmuramoylalanyl-D-glutamate—2,6-diaminopimelate ligase (murE) {Hi}	53	BB772	flg P-ring prt (fliI) {Ar}	51	
BB384	basic membrane prt C (bcmC) {Bb}	100	BB304	UDP-N-Acmuramoylalanyl-D-glutamyl-2,6-diamino-pimelate-D-alanyl-D-alanine ligase (murF) {Bb}	100	BB279	flg prt (fliL) {Bb}	100	
BB385	basic membrane prt D (bmdP) {Bb}	100	BB767	UDP-N-Acglucosamine-N-Acmuramyl-(pentapeptide) pyrophosphoryl-undecaprenol NAG Tase (murG) {Bs}	56	BB282	flg prt (fliD) {Bb}	99	
BB108	basic membrane prt {Tp}	50				BB285	flg prt (fliC) {Bb}	100	
BB319	exported prt (tpn38b) {Tp}	50				BB286	flg prt (fliB) {Bb}	100	
BB347	fibronectin/fibrinogen-BP, put {Sp}	53				BB287	flg prt (fliA) {Bb}	100	
BB442	inner membrane prt {Hi}	63				BB180	flg prt, put {Bb}	100	
BB365	lipoprotein LA7 {Bb}	100				BB550	flg prt (fliA) {Vp}	57	
BB603	membrane-associated prt p66 {Bb}	100				BB270	flg-associated GTP-BP(fliF) {Bb}	100	
BB753	membrane spanning prt, put {Se}	49				BB288	flg-specific ATPSase (fliI) {Bb}	100	
BB795	outer membrane prt {Ng}	48							
BB167	outer membrane prt (tpn50) {Tp}	48							
BB735	rare lipoprt A (rlpA) {Hi}	58							
BB10	surface-located membrane prt 1 (lmp1) {Mh}	45							
BB158	S2 prt {Bb}	60							
lp54									
BBA24	decorin BP A (dbpA) {Bb}	94	BB744	antigen, p83/100 {Bb}	100	BB660	GTP-BP(era) {Ec}	62	
BBA25	decorin BPB (dbpB) {Bb}	100	BB572	glycosyl Tase (lgtD) {Hi}	56	BB781	GTP-BP(obi) {Syn}	63	
BBA36	lipoprotein {Bb}	54				BB578	MC prt (mcp-1) {Tm}	52	
BBA59	lipoprotein {Bb}	100	lp54			BB596	MC prt (mcp-2) {Td}	57	
BBA62	lipoprotein {Bb}	100	BBA64	antigen, P35 {Bb}	100	BB597	MC prt (mcp-3) {Td}	52	
BBA74	outer membrane porin (oms28) {Bb}	100	BBA66	antigen, P35, put {Bb}	48	BB680	MC prt (mcp-4) {Ec}	61	
BBA15	outer surface prt A (ospA) {Bb}	99	BBA73	antigen, P35, put {Bb}	52	BB681	MC prt (mcp-5) {Ec}	52	
BBA16	outer surface prt B (ospB) {Bb}	99				BB415	prt-glutamate methylesterase (cheB-1) {Sc}	63	
BBA03	outer membrane prt {Bb}	100	lp38			BB568	prt-glutamate methylesterase (cheB-2) {Sc}	59	
BBA52	outer membrane prt {Bb}	100	BBJ41	antigen, P35, put {Bb}	47	BB312	purine-B chemotaxis prt (cheW-1) {Bb}	58	
BBA05	S1 prt {Bb}	100				BB670	purine-B chemotaxis prt (cheW-2) {Ec}	66	
BBA04	S2 prt {Bb}	100	lp36						
BBA60	surface lipoprt P27 {Bb}	81	BBK15	antigen, P35, put {Bb}	50	BB565	purine-B chemotaxis prt (cheW-3) {Bb}	100	
lp38			BBK50	immunogenic prt P37 {Bb}	99				
BBJ09	outer surface prt D (ospD) {Bb}	100	BBK32	immunogenic prt P35, put {Bb}	97				
BBJ50	outer membrane prt, put {Bb}	61	BBK37	immunogenic prt P37, put {Bb}	71				
BBJ51	vlsEl1 prt, put {Bb}	62	BBK45	immunogenic prt P37, put {Bb}	49				
BBJ52	vlsEl1 prt, put {Bb}	55	BBK46	immunogenic prt P37, put {Bb}	68				
			BBK48	immunogenic prt P37, put {Bb}	49				
lp36			lp28-3						
BBK53	outer membrane prt {Bb}	91	BBH32	antigen, P35, put {Bb}	55	BB670	purine-B chemotaxis prt (cheW-3) {Bb}	100	
BBK52	prt p23 {Bb}	99							
lp28-1									
BBF01	erpD prt, put {Bb}	53	lp25						
BBF22	prt p23, put {Bb}	78	BBE31	antigen, P35, put {Bb}	54				
BBF32	vls recombination cassette Vls3-16 {Bb}	100							
			BB289	Surface structures flg assembly prt (fliH) {Bb}	100				

lp28-2							
BBG08	stage 0 sporulation prt J (spoOJ) {Bb}	66	<i>ATP-proton motive force interconversion</i>		BB575	CTPSase (pyrG) {Mj}	71
			BB094 V-type ATPase, sub A (atpA) {Mb}	64	BB775	Salvage of nucleosides and nucleotides	
			BB093 V-type ATPase, sub B (atpB) {Mb}	62	BB777	adenine phosphoribosylTase (apt) {Ta}	63
<i>Cell killing</i>			BB092 V-type ATPase, sub D (atpD) {Mj}	51	BB618	cytidine deaminase (cdd) {Mp}	61
BB143	a-hemolysin (hlyA) {Ah}	62	BB096 V-type ATPase, sub E (atpE) {Mj}	54	BB239	deoxyguanosine/deoxyadenosine kinase(I) sub 2 (dck) {La}	59
BB117	hemolysin III (yplQ) {Bs}	61	BB091 V-type ATPase, sub I (atpI) {Eh}	53	BB375	pfs prt (pfs-1) {Ec}	64
BB506	hemolysin (tlyA) {Sh}	59	BB090 V-type ATPase, sub K (atpK) {Mj}	54	BB588	pfs prt (pfs-2) {Hi}	59
BB059	hemolysin (tlyC) {Sh}	65			BB791	thymidine kinase (tdk) {Bs}	47
BB202	hemolysin, put {Syn}	54	<i>Electron transport</i>		BB015	uridine kinase (udk) {Bb}	100
			BB061 thioredoxin (trxA) {Ec}	59			
<i>Chaperones</i>			BB515 thioredoxin RDase (trxB) {Bb}	99			
BB741	chaperonin (groES) {Pg}	77	<i>Fermentation</i>				
BB602	chaperonin, put {Cb}	72	BB622 acetate kinase (ackA) {Ec}	63	lp36		
BB519	grpE prt (grpE) {Bb}	100	BB589 P AcTase (pta) {Tt}	65	BBK17	adenine deaminase (adeC) {Bs}	57
BB295	heat shock prt (hsfU) {Bb}	100					
BB296	heat shock prt (hsfV) {Bb}	100	<i>Glycolysis</i>		Regulatory functions		
BB649	heat shock prt (groEL) {Bb}	100	BB337 enolase (eno) {Bs}	79	<i>General</i>		
BB517	heat shock prt (dnaj-1) {Bb}	100	BB445 fructose-bisPaldolase (fba) {Ec}	80	BB184	carbon storage regulator (csrA) {Hi}	63
BB655	heat shock prt (dnaj-2) {Ca}	59	BB730 glucose-6-Pisomerase (pgi) {Pf}	62	BB647	ferric uptake regulation prt (fur) {Sp}	48
BB264	heat shock prt 70 (dnak-1) {Bb}	61	BB057 glyceraldehyde 3-PDHase (gap) {Bb}	99	BB198	guanosine-3',5'-bis(diP) 3'-pyrophosphohydrolase (spoT) {Ec}	61
BB518	heat shock prt 70 (dnak-2) {Bb}	100	BB630 1-phosphofructoKase (fruK) {Hi}	52	BB737	histidine phosphoKase/PPase, put {Ml}	49
BB560	heat shock prt 90 (htpG) {Bb}	100	BB056 phosphoglycerate Kase (pgk) {Bb}	99	BB176	methanol DHase regulator (moxR) {Bb}	99
			BB658 phosphoglycerate mutase (gpmA) {Ec}	79	BB416	pheromone shutdown prt (trab) {Ef}	61
<i>Detoxification</i>			BB348 pyruvate Kase (pyk) {Bs}	62	BB042	P transport system regulatory prt (phoU) {Pa}	57
BB153	superoxide dismutase (soda) {Hi}	68	BB727 pyroP-fructose 6-P1-PPTase (pfk) {Eh}	65	BB379	prt Kase C1 inhibitor (pkcI) {Bb}	100
BB690	neutrophil activating prt (napA) {Hi}	57	BB020 pyroP-fructose 6-P1-PPTase, b sub (pfp) {Bb}	100	BB419	response regulatory prt (rrp-1) {Syn}	57
BB179	thiophene and furan oxidation prt (thdF) {Bb}	100	BB055 triosePisomerase {Bb}	100	BB763	response regulatory prt (rrp-2) {Ec}	67
					BB764	sensory transduction histidine Kase, put {Bs}	60
<i>Protein and peptide secretion</i>			BB657 ribose 5-Pisomerase (rpi) {Mj}	61	BB420	sensory transduction histidine Kase, put {Syn}	61
BB154	preprt translocase sub (secA) {Bb}	100			BB693	xylene operon regulatory prt (xylR-1) {Th.}	48
BB395	preprt translocase sub (secE) {Bl}	62	<i>Pentose phosphate pathway</i>		BB831	xylene operon regulatory prt (xylR-2) {Syn}	51
BB498	preprt translocase sub (secY) {Sc}	64	BB222 glucose-6-P1-DHase, put {As}	48			
BB362	prolipoprt diacylglycerlyl Tase (lgt) {Ec}	56	BB636 glucose-6-P1-DHase (zwf) {Hi}	64	lp54		
BB652	prt-export membrane prt (secD) {Ec}	63	BB561 phosphogluconate DHase (gnd) {Sd}	71	BBA07 chpAI prt, put {Ec}	55	
BB653	prt-export membrane prt (secF) {Hi}	63	BB657 ribose 5-Pisomerase (rpi) {Mj}	61			
BB030	signal peptidase I (lepB-1) {Bs}	51					
BB031	signal peptidase I (lepB-2) {Syn}	57	<i>Sugars</i>				
BB263	signal peptidase I (lepB-3) {St}	57	BB407 mannose-6-Pisomerase (manA) {Ec}	54			
BB469	signal peptidase II (lsp) {Sc}	60	BB444 nucleotide sugar epimerase {Vc}	69			
BB694	signal recognition particle prt (fifh) {Bs}	70	BB676 phosphoglycolate PPase (gph) {Hi}	50			
BB610	trigger factor (tig) {Hi}	50	BB207 UTP-glucose-1-PuridylylTase (gtAB) {Bs}	63			
			BB545 xylulokinase (xyIb) {Bs}	43			
<i>Transformation</i>							
BB591	competence locus E, put {Bs}	54	Fatty acid and phospholipid metabolism		Replication		
BB798	competence prt F, put {Hi}	52	<i>General</i>		<i>Degradation of DNA</i>		
			BB037 1-acyl-sn-glycerol-3-PAcTase (plsC) {Bb}	100	BB411 endonuclease precursor (nucA) {As}	53	
Central intermediary metabolism			BB685 3-OH-3-methylglutaryl-CoA RDase (mvaA) {Pm}	52	<i>DNA replication, restriction, modification, recombination, and repair</i>		
<i>General</i>			BB683 3-OH-3-methylglutaryl-CoA Sase {At}	53	BB422 3-methyladenine DNA glycosylase (mag) {At}	56	
BB241	glycerol kinase (glpK) {Ec}	74	BB109 Ac-CoAC-AcTase (fadA) {Hi}	67	BB827 ATP-dep helicase (hrpA) {Ec}	61	
BB243	glycerol-3-PDHase, anaerobic (glpA) {Hi}	52	BB704 acyl carrier prt {Syn}	65	BB437 chromosomal replication init prt (dnaA) {Bb}	100	
BB376	SAM Sase (metK) {Bs}	72	BB721 CDP-diacylglycerol-glycerol-3-P 3-phosphatidylTase {Bs}	55	BB435 DNAgyrase, sub A (gyrA) {Bs}	67	
			BB327 glycerol-3-PO-acylTase, put {So}	50	BB436 DNAgyrase, sub B (gyrB) {Bb}	99	
<i>Amino sugars</i>			BB368 glycerol-3-PDHase, NAD(P)+ (gpsA) {Bs}	54	BB344 DNAbellicase (uvrD) {Ec}	55	
BB152	glucosamine-6-Pisomerase (nagB) {Hi}	79	BB137 long-chain-fatty-acid CoAligase {Syn}	54	BB552 DNAligase (lig) {Ta}	56	
BB151	N-Acglucosamine-6-PdeAcase (nagA) {Hi}	54	BB593 long-chain-fatty-acid CoAligase {Syn}	54	BB211 DNA mismatch repair prt (mutL) {Hi}	55	
			BB688 melvalonate Kase {Mj}	51	BB797 DNA mismatch repair prt (mutS) {Hi}	57	
<i>Degradation of polysaccharides</i>			BB686 melvalonate pyroPDCase {Sc}	52	BB098 DNA mismatch repair prt, put {Syn}	51	
BB620	b-glucosidase, put {Syn}	58	BB119 phosphatidate cytidylylTase (cdsA), AFS{Ec}	61	BB548 DNApolymerase I (polA) {Hi}	61	
BB002	b-N-Achexosaminidase, put {As}	54	BB249 phosphatidylTase {Hp}	52	BB579 DNApolymerase III, sub a (dnAE) {Ec}	62	
			BB687 phosphomevalonate Kase, put {Sc}	53	BB438 DNApolymerase III, sub b (dnAN) {Bb}	100	
<i>Phosphorus compounds</i>					BB461 DNApolymerase III, sub g/t (dnAX) {Bs}	61	
BB533	phnPprt (phnP) {Ec}	48			BB710 DNAPrimase (dnaG) {Bs}	56	
					BB581 DNArecombinase (recG) {Syn}	60	
<i>Polysaccharides - (cytoplasmic)</i>					BB828 DNAtopoisomerase I (topA) {Syn}	64	
BB166	4-a-glucanoTase (malQ) {Syn}	55	Purines, pyrimidines, nucleosides, nucleotides		BB035 DNAtopoisomerase IV (parC) {Bb}	58	
BB004	phosphoglucomutase (femD) {Mj}	52	<i>Nucleotide and nucleoside interconversion</i>		BB036 DNAtopoisomerase IV (parE) {Bb}	56	
BB835	phosphomannomutase (cpsG) {Hi}	57	BB417 adenylate kinase (adk) {Bs}	64	BB745 endonuclease III (nth) {Syn}	59	
			BB128 cytidylate kinase (cmk-1) {Bs}	58	BB837 excinuclease ABC, sub A (uvrA) {Ec}	4	
<i>Energy metabolism</i>			BB819 cytidylate kinase (cmk-2) {Mj}	57	BB836 excinuclease ABC, sub B (uvrB) {Ec}	71	
<i>Aerobic</i>			BB463 nucleoside-diphosphatase (ndk) {Bs}	70	BB457 excinuclease ABC, sub C (uvrC) {Syn}	57	
BB728	NADH oxidase, water-forming (nox) {Sh}	59	BB793 thymidylate kinase (tmk) {Mj}	59	BB534 exodeoxyribonuclease III (exoA) {Bs}	67	
			BB571 uridylate kinase (smbA) {Mj}	54	BB632 exodeoxyribonuclease V, a chain		
<i>Amino acids and amines</i>							
BB841	arginine deiminase (arcA) {Cp}	75	<i>Purine ribonucleotide biosynthesis</i>				
BB842	ornithine carbamoylTase (arcB) {Ng}	74	BB544 phosphoribosyl pyroPSe (prs) {Mp}	59			
<i>Anaerobic</i>			cp26				
BB016	glpE prt (glpE) {Hi}	53	BBB18 GMPSase (guAA) {Bb}	100			
BB087	L-lactate DHase (ldh) {Bs}	72	BBB17 IMPDHase (guAB) {Bb}	100			
			<i>Pyrimidine ribonucleotide biosynthesis</i>				

BB145	GBPABC transporter, permease prt (proW) {Ec}	66	BB557	phosphocarrier prt HPr (ptsH-2) {Hi}	69	BB141	membrane fusion prt (mtrC) {Hi}	47	
BB144	GBPABC transporter, BP (proX) {Ec}	43	BB558	phosphoenolpyruvate-prt PPase (ptsI) {Sc}	65	lp28-4	multidrug-efflux transporter {Hp}	55	
BB334	OPABC transporter, ATP-BP(oppD) {Bs}	75	BB408	PTS system, fru-specific IIABC (fruA-1) {Ec}	65	BBI26	multidrug-efflux transporter {Hp}	55	
BB335	OPABC transporter, ATP-BP (oppF) {Bs}	80	BB629	PTS system, fru-specific IIABC (fruA-2) {Ec}	68	lp25	pyrazinamidase/nicotinamidase (pnCA) {Mt}	56	
BB332	OPABC transporter, permease prt (oppB-1){Ec}	68	BB559	PTS system, glu-specific IIA (ctr) {Bb}	100	<i>Transposon-related functions</i>			
BB747	OPABC transporter, permease prt (oppB-2){Bs}	54	BB645	PTS system, glu-specific IIBC (ptsG) {Sc}	67	lp38	BBJ05	transposase-like prt, put {Bb}	89
BB333	OPABC transporter, permease prt (oppC-1){Hi}	64	BB116	PTS system, mal/glu-specific IIABC (malIX) {Ec}	56	lp36	BBK25	transposase-like prt, put {Bb}	80
BB746	OPABC transporter, permease prt (oppC-2){Bs}	52	BB677	RG ABC transporter, ATP-BP (mgmA) {Mg}	68	lp28-1	BBF18	transposase-like prt, put {Bb}	96
BB328	OPABC transporter, periplasmic BP (oppA-1) {Bb}	74	BB678	RG ABC transporter, permease prt (rbsC-1) {Mg}	51	BBF19	transposase-like prt, put {Bb}	96	
BB329	OPABC transporter, periplasmic BP(oppA-2) {Bb}	94	BB679	RG ABC transporter, permease prt (rbsC-2) {Mp}	52	lp28-2	BBG05	transposase-like prt {Bb}	99
BB330	OPABC transporter, periplasmic BP(oppA-3) {Bb}	81	cp26	PTS system, cello-specific IIC (celB) {Bs}	62	BBG05	transposase-like prt {Bb}	99	
BB642	SPABC transporter, ATP-BP (potA) {Ec}	69	BBB04	PTS system, cello-specific IIA(celC) {Bs}	61	lp28-3	BBH40	transposase-like prt, put {Bb}	57
BB641	SPABC transporter, permease prt (potB) {Ec}	65	BBB06	PTS system, cello-specific IIB (celA) {Bs}	73	lp17	BBD20	transposase-like prt, put {Bb}	99
BB640	SPABC transporter, permease prt (potC) {Ec}	63	BBB29	PTS system, glu-specific IIBC, put {Ec}	70	BBD23	transposase-like prt, put {Bb}	88	
BB639	SPABC transporter, periplasmic BP(potD) {Ec}	53	Cations			Unknown			
lp54			BB724	K+ transport prt (ntpJ) {Eh}	60	BB528	aldoze RDase, put {Bs}	57	
BBA34	OPABC transporter, periplasmic BP(oppA-4) {Bc}	66	BB380	Mg2+ transport prt (mgtE) {Bb}	100	BB684	carotenoid biosynprt, put {Ss}	58	
cp26			BB164	Na+/Ca+ exchange prt, put {Mj}	59	BB671	chemotaxis operon prt (cheX) {Bb}	99	
BBB16	OPABC transporter, periplasmic BP(oppA) {Bb}	78	BB447	Na+/H+ antiporter (napA) {Eh}	57	BB250	dedAppt (dedA) {Ec}	54	
<i>Anions</i>			BB637	Na+/H+ antiporter (nhaC-1) {Bf}	48	BB168	dnaK suppressor, put {Ec}	53	
BB218	PABC transporter, ATP-BP(pstB) {Pa}	74	BB638	Na+/H+ antiporter (nhaC-2) {Hi}	50	BB508	GTP-BP(Tp)	59	
BB216	PABC transporter, permease prt (pstC) {Ec}	58	BB451	chromate transport prt, put {Mj}	58	BB219	gufAppt {Mx}	54	
BB217	PABC transporter, permease prt (pstA) {Syn}	63	Othercategories			BB421	hydrolase {Hi}	58	
BB215	PABC transporter, periplasmic P-BP(pstS) {Syn}	48	BB237	acid-inducible prt (act206) {Rm}	45	BB524	inositol monoPPase {Hs}	47	
<i>Carbohydrates, organic alcohols, and acids</i>			BB786	general stress prt (ctc) {Bs}	51	BB454	lipopolysaccharide biosyn-related prt {Mj}	49	
BB240	glycerol uptake facilitator (glpF) {Bs}	57	BB785	stage V sporulation prt G {Bm}	74	BB702	lipopolysaccharide biosyn-related prt {Hi}	62	
BB604	L-lactate permease (lctP) {Ec}	57	BB810	virulence factor mviN prt (mviN) {Hi}	51	BB045	P115 prt {Mh}	53	
BB318	methylgalactoside ABC transporter, ATP-BP (mglA) {Hi}	54	<i>Colicin-related functions</i>			BB336	P26 {Bb}	100	
BB814	pantothenate permease (panF) {Ec}	63	BB766	colicin V production prt, put {Hi}	52	BB363	periplasmic prt {Bb}	100	
BB448	phosphocarrier prt HPr (ptsH-1) {Mg}	56	BB546	outer membrane integrity prt (tolA) {Hi}	44	BB033	small prt (smpB) {Rp}	70	
<i>Drug and analog sensitivity</i>			<i>lp54</i>			BB297	sng prt {Bb}	100	
BB140	acriflavine resistance prt (acrB) {Hi}	54	BB140	acriflavine resistance prt (acrB) {Hi}	53	BB443	spolIIJ-associated prt (jag) {Bs}	56	
BB258	bacitracin resistance prt (bacA) {Ec}	63	BB258	bacitracin resistance prt (bacA) {Ec}	56	<i>lp28-4</i>			
BB586	femAppt (femA) {Se}	47	BBI06	pfs prt (pfs) {Ec}	47	BB106	pf115 prt {Mh}	59	
<i>cp9</i>			BB258	rev prt (rev) {Bb}	53	BBC09	rev prt (rev) {Bb}	62	
<i>lp28-4</i>			BB586	femAppt (femA) {Se}	47	BBC10	rev prt (rev) {Bb}	66	