

(A)

LivJ_C.jejuni 1 MKKLTLTSLVLTM---VNCLYAKDINIGVVLPLTGTVAAYGQDVFNGIELANKLQPKLS--NGDVIKLI 64
LivK_C.jejuni 1 MKKSLILASILSL-----SLSAAEVKIGVVLPLSGATAAYGQSALEGIKLANSMQSALS--NGDKVSLA 62
LivJ_E.coli 1 MNIKGKALLAGCIALAFSNMALAEDIKVAVVGAMSGPVAQYGDQEF TGAEQAVADINAKGGIKGNKLQIV 70
LivK_E.coli 1 MKRNAKTI IAGMIALA ISHTAMADDIKVAVVGAMSGPIAQWGDMEFNGARQA IKDINA KGGIKGDKLVGV 70
Consensus_ss: hhhhhhhhhhhhhhh eeeeeee hhhhhhhhhhhhhhhhhhh eeeeeee

LivJ_C.jejuni 65 TIDTKGDKLETSNGVNRLIATDKVLGIIGEATTPNTIQAISIAEEKKIPLIAPVASGDKLLDK-KKYASR 133
LivK_C.jejuni 63 IIDTKGDKLESSSGANRLVSQDKVIGLIGEMVTANTLQVMRVAEDNKIPLIAPAATGDRLLDK-KIYSSR 131
LivJ_E.coli 71 KYDDACDPKQAVAVANKVVND-GIKYVIGHLCSSSTQPASDIYEDEGILMITPAATAPELTARGYQLILR 139
LivK_E.coli 71 EYDDACDPKQAVAVANKIVND-GIKYVIGHLCSSSTQPASDIYEDEGILMISPGATNPELTQRGYQHIMR 139
Consensus_ss: eee hhhhhhhhhhhhh eeee hhhhhhhhhhhhh eeeee hhh eeee

LivJ_C.jejuni 134 VCFKDSFQGDKFATYVSKDLGLKNAVIIIDQSNVYSLGLARAFENSFKNNGGKI IKKLVINSGDKDFRAV 203
LivK_C.jejuni 132 VCFMDSFQGS SLAKYVFSKLNYSKSAVIVVDQSTDYSLGLAKAFEKQYKSNGGQILRLIRLVNSGDKDFRAI 201
LivJ_E.coli 140 TTGLDS DQGP TAAKYILEKV K PQ-RIAI VHDKQYGEGLARAVQDGLKKGNAVNVFFDGITAGEKDFSTL 208
LivK_E.coli 140 TAGLDSSQGPTAAKYILETVK PQ-RIAI IHDKQYGEGLARSVDGLKAANANVVFFDGITAGEKDF SAL 208
Consensus_ss: e hhhhhhhhhhhhh eeeeeee hhhhhhhhhhhhh eeeeeee hhhh

LivJ_C.jejuni 204 VSQ LKS LNP DFVYMPIYHPEAALIARQARQIGFDKLLVAGDGVNNQTFIDLGSSAVNGVIFTDSFDYNSP 273
LivK_C.jejuni 202 VAQVKSLNPEFIFLPLYSEASLFARQSKLAGLNIPMG SADGVADQTFISLAGDASEGYIFTDSFDANNP 271
LivJ_E.coli 209 VARLKKENIDFVYGGYHPMGQILRQARAAGLKTQFMGPEGVANVSLSN IAGESAEGLLVTKPKNY--D 276
LivK_E.coli 209 IARLKKENIDFVYGGYYPMGQMLRQARSVGLKTQFMGP EGVGNASLSNIAGDAAEGLVTPMPKRY--D 276
Consensus_ss: hhhhhh eeeee hhhhhhhhhhh eeeee hhhhhhhhh eeeee

LivJ_C.jejuni 274 STQLGKDFVAAYEKVKGTKELPASFAMGADAYFVMLNAMNACVDNLSSECINSKIHQTKDFQAVG GVISI 343
LivK_C.jejuni 272 TTKLSKEFISVYEKAKGTKEVPNFSAMGADAYFVMLNAMNACVENLTSKCVNEKIHQTKNYQGVSGVISI 341
LivJ_E.coli 277 QVPANKPIVDAIKAKKQD-PSGAFVWTTYAALQSLQAGLNQS---DDPAEIAKY LKAN-SVDVTMGPLTW 341
LivK_E.coli 277 QDPANQGI VDALKADKKD-PSG PYVWIT YAAVQSLATA LERTGS-DEPLALVKDLKAN-GANTVI GPLNW 343
Consensus_ss: hhhhhhhhhhhhh hhhhhhhhhhhhhhhhhhh hhhhhhhh eeeee

LivJ_C.jejuni 344 DESGNAIR-SVVIKEIQNKQNYKTIINP 371
LivK_C.jejuni 342 DQTGNATR-SVVVKEIKNQKQNYKDIINP 369
LivJ_E.coli 342 DEKGD LKGFEFGVFDWHANGTATDAK--- 367
LivK_E.coli 344 DEKGD LKGFD FGVFQWHADGSSTA AK--- 369
Consensus_ss: eeeeeee eeeeeee

(B)

	EcLivJ	EcLivK	CjLivJ	CjLivK
EcLivJ	-	(100% QC) 77%	(92% QC) 28%	(70% QC) 30%
EcLivK	(100% QC) 77%	-	(75% QC) 29%	(66% QC) 28%
CjLivJ	(93% QC) 28%	(74% QC) 29%	-	(94% QC) 64%
CjLivK	(73% QC) 29%	(69% QC) 28%	(100% QC) 62%	-