

A

CopR_PA01	----MKLLIVEDEPRIGQYLRQGLAEAGFAVDLSDDGNEGEQLALGGDYDLLILDVMLPG	56
P0AA16_OmpR_Escherichia_coli	MQENYKILVVDDDMRLRALLERYLTEQGFQVRSVANAEQMDRLLTRESFHLMLVLDLMLPG	60
P0AE88_CpxR_Escherichia_coli	---MNKILLVDDDRELTSLKELLEMEGFNVIVAHDGEQALDL--LDDSIDLLLLLDVMMPK	56
P0AFJ5_PhoB_Escherichia_coli	--MARRILVVEDEAPIREMVCVLEQNGFQPVAEEDYDSAVNQLNEPWPDLILLDWMLPG	58
P0DM78_PhoP_Salmonella_typhimurium	---MMRVLVVEDNALLRHHLKVQLQDSGHQVDAEDAREADYYLNEHLPDIAIVDLGLPD	57
	::*:* : : * * : . . . : :* :*	
CopR_PA01	RDGWQILRSVRDAGM--TVPVLFLTARDAVEDRVRGLEQGADDYLVKPFAFVELLARVRT	114
P0AA16_OmpR_Escherichia_coli	EDGLSICRRLRSQSN--PMPIIMVTAKGEEVDRIVGLEIGADDYIPKPFNPRELLARIRA	118
P0AE88_CpxR_Escherichia_coli	KNGIDTLKALR-QTH--QTPVIMLTARGSELDRVLGLELGADDYLKPFNDRELVARIRA	113
P0AFJ5_PhoB_Escherichia_coli	GSGIQFIKHLKRESMTRDIPVVMLTARGEEDRVRGLETGADDYITKPFSPKELVARIKA	118
P0DM78_PhoP_Salmonella_typhimurium	EDGLSLIRWRSSDV--SLPVLVLTAREGWQDKVEVLSSGADDYVTKPFHIEEVMARMQA	115
	. * . : : * : : * : * : * : * : * : * : * : * : * : * : * : * : *	
CopR_PA01	LLRRGSQQL-----QETTLQADLELDLLRRRVQRQGRIDLTAKEFALLELLLRSG	167
P0AA16_OmpR_Escherichia_coli	VLRRQANELPGA-PSQEEAVIAFGKFKLNLGTREMFREDEPMPLTSGEFAVLKALVSHPR	177
P0AE88_CpxR_Escherichia_coli	ILRRSHWSEQQNNNDNGSPTLEVDALVLNPGRQEASFDGQTLELTGTEFTLLYLLAQHLG	173
P0AFJ5_PhoB_Escherichia_coli	VMRRISPMA-----VEEVIEMQGLSLDPTSHRVMAGEEPELEMGPTEFKLLHFFMTHPE	171
P0DM78_PhoP_Salmonella_typhimurium	LMRRNSG-L-----ASQVINIPPFQVDLSRRELSVNEEVIKLTAFEYTIMETLIRNNG	167
	:*** . . : : : : : : : * : : : .	
CopR_PA01	EVLPKSLIASQVWDMNFSDTNVIEVAIRRLRAKVDDD-YPQRLIHTVRGMGYVLEERDE	226
P0AA16_OmpR_Escherichia_coli	EPLSRDKLMNLARGREYSAMERSIDVQISRLRRMVEEDPAHPRYIQTVWGLGYVFPDGS	237
P0AE88_CpxR_Escherichia_coli	QVVSREHLSQEVLGKRLTPFDRAIDMHISNLRRKLPDRKDGHVPFKTLRGRGYLMVSAS-	232
P0AFJ5_PhoB_Escherichia_coli	RVYSREQLLNHVWGTNVYVEDRTVDVHIRRLRKALEPG-GHDRMVQTVRGTGYRFSTRF-	229
P0DM78_PhoP_Salmonella_typhimurium	KVVSKDSLMLQLYPDAELRESHTIDVLMGRLRKKIQAQ-YPHDVITTVRGQGYL FELR--	224

CopS_PA01	SLLEFYQPLAEDRDIRLLREGSL-SLPGDRGMLRRVLANLLDNALRFTADGGEIRIRLGD	366
Q88KY2_Pseudomonas_putida	ALLEYYAPLAEDSDVQMLREGEA-VLHGDQHMLRRALSNNLLDNAMRFTPAGGQIKVTLGP	373
C3K5G9_Pseudomonas_fluorescens	ALLEFFALLAEDAHSVLSVREGTA-HTMGDRGMLRRALSNNLLDNALRFTPAGGEVVRVMVD	371
U3B9J6_Pseudomonas_alcaligenes	ALAEYFTPLAEAEAGVHLHVDGQA-ALSADRALLHRALSNNLIDNALRFTPRGGELHLSAQ	361
A0A085VDP0_Pseudomonas_syringae	TVLEFFAPLAEDAQVTLSSDGHA-SIDGDRTMLRRVLSNNLLDNVHRHTPAGGYVKVTLSE	374
CusS_E.coli	KVDFDFEALAEDRGVELRFVGDQKQVAGDPLMLRRALSNNLSNALRYTPTGETIVVRCQT	403
Q83M20_Shigella_flexneri	KVDFDFEALAEDRGVELRFVGDQKQVAGDPLMLRRALSNNLSNALRYTPTRETIVVRCQT	403
A8AJR2_Citrobacter_koseri	KVDFDFEAWAEERVRLHFEGRACVWSDPIMLRRALSNNLSNAMRYTPKGEAVTVRLKE	403
A0A378C5Z1_Klebsiella_pneumoniae	KVFEFFEAWAEKAVLRFVGSCHRVIIGDPLMLRRALSNNLSNALRYTPAQVATVQLSE	400
A0A4V2W4T5_Biostraticola_tofi	KVFEFFEAWADEREVLNITGRAQPIEGDPLMLRRALSNNLSNAVRYTPPGNTIIIVQLTE	417
	: : : * : : * . * : * : * : * : * : * : * : :	

CopS_PA01	----RRLSVENQCPAIPPERLPRLFRDFRYRADPARREGQGEHAGLGLAICRSIVQAHGGE	422
Q88KY2_Pseudomonas_putida	---GPTINVANTGLAIDPAALPRLFRDFRYRVDPARREGSSSEHAGLGLAITRSIVQAHGCC	430
C3K5G9_Pseudomonas_fluorescens	---GVTLTVENTGAGIPAQLLPRLFRDFRYRADPARHEGSSSEHAGLGLAITQSVIRAHHGR	428
U3B9J6_Pseudomonas_alcaligenes	QGAKVRIEVANQCPPIPLDLRERLFRDFRYRADPARREGGAEHAGLGLAIARSIVQAHGGA	421
A0A085VDP0_Pseudomonas_syringae	VDKRARINVENSGADIPESLLPRLFRDFRYRADQARSE-SREHAGLGLAITRSIIQAHGGT	433
CusS_E.coli	VDHLVQVIVENPGTPIAIEHLPRLFRDFRYRVDPSRQR-KGEGSGIGLAIVKSIVVAHKGT	462
Q83M20_Shigella_flexneri	VDHQVQVSVENPGTPIAIEHLPRLFRDFRYRVDPSRQR-KGEGSGIGLAIVKSIVVAHKGT	462
A8AJR2_Citrobacter_koseri	MDRQAQITVENPGAPIAIEHLPRLFRDFRYRVDPSRQR-KGEGSGIGLAIVKSIVIAHQGT	462
A0A378C5Z1_Klebsiella_pneumoniae	SAETVRLVVENPGTPIAIEHLPRLFRDFRYRVDPSRQR-KGEGSGIGLAIVKSIVGAHHGS	459
A0A4V2W4T5_Biostraticola_tofi	RDQWVEIQVENPGAMIAEQHLPRLFRDFRYRADPSRQK-KGEGSGIGLAIVKSIVTAHQGK	476
	: * * * * ***** * * . * : * : * * : * * :	

CopS_PA01	IRCESADGWTRFVIDFARPRR	443
Q88KY2_Pseudomonas_putida	IRAECEGGWTRFVIEFTQDR-	450
C3K5G9_Pseudomonas_fluorescens	IYCESGAGWTRFVIELPAGD-	448
U3B9J6_Pseudomonas_alcaligenes	IRCESAEGWTRFVILEFPA---	439
A0A085VDP0_Pseudomonas_syringae	IRCESKEGVTRFLIELPIQK-	453
CusS_E.coli	VAVTSDARGTRFVITLPA---	480
Q83M20_Shigella_flexneri	VAVTSDARGTRFVITLPA---	480
A8AJR2_Citrobacter_koseri	VSVTSDLRATRFILTLPKHGD	483
A0A378C5Z1_Klebsiella_pneumoniae	VAAQSDLRSTRFIVVLPK---	477
A0A4V2W4T5_Biostraticola_tofi	ISVSSDAVSTKFSLSLPKRAS	497
	: . * : * : :	