SUPPLEMENTARY INFORMATION



PROFILE PS01124





		10	20	30	40	50	60	70 80
CC9311_FciG/1-55	MP	KR I TFELNDELHI	KLKLLCYTESL	<mark>S G</mark>	HILROCVSEF	C D <mark>K H D</mark>	AHLIEL	- 1 D K R S R
WH8020_FciG/1-55	MP	K R I T F E L N D E L H I	R K L K L L C <mark>Y T E S</mark> L	<mark>S I G</mark>	HILROCVSDF	0 D <mark>K H D</mark>	· · AHLIEL · ·	• IDK <mark>RS</mark> K•••••
WH8016_FciG/1-67	MP	KR I TFELHDDL <mark>H</mark> I	< K <mark>lk</mark> llc <mark>ytes</mark> l	<mark>S I G</mark>	HILROCVSDF	0 D <mark>K H D</mark>	· · AHLIELM ·	· ISDQSSWLTLGVVLIAR · · · ·
MV/R-18-1/1-55	MP	KR I TFELNDEL <mark>H</mark> I	< K L K L L C Y T E S L	<mark>S I G</mark>	HIL ROCVSDF	0 D <mark>K H D</mark>	· · AHLIEL · ·	· IDK <mark>RS</mark> K····
CC9902_FciC/1-56	MP	KR V T F E L S D E L H I	KKLKLLC <mark>YTES</mark> V	<mark>S I G</mark>	HIL ROCVSDF	0 D <mark>K H D</mark>	· · AHLIEL · ·	· IDK <mark>RS</mark> HK····
BL107_FciG/1-56	MP	KR V T F E L S D E L H I	KKLKLLC <mark>YTES</mark> V	· · · · · · <mark>S I G</mark>	HILROCVSDF	0 0 <mark>6 8 9 0</mark>	· · AHLIEL · ·	· IDNRSQK · · · · · · · · · · · · · · · · · · ·
RS9916_FciC/1-55	MP	KR V T F E L S D E L H I	KKLKLLCYTESV	· · · · · · <mark>S I G</mark>	HILRECVVDF	CA <mark>KHD</mark>	· · AHLIEI · ·	· IDKRVK·····
BIOS-E 4-1_Fci G/1-55	MP	KR V T F E L S D E L H I	KKLKLLCYTEG V	· · · · · · <mark>S I G</mark>	HILRECVSDF	C N <mark>K H D</mark>	· · AHLIEL · ·	· IDHRSK
BIOS-U3-1_FciG/1-55	MP	KRVT FELSDDLHI	KLKLLCYTESV	· · · · · · <mark>S G</mark>	HILRECVSEF	C N K H D	· · AHLIEL · ·	· IDRRSK
RCC307_FciC/1-55	MP	R V T FELSDELHI	KEKLLCYTES V	· · · · · · <mark>S I G</mark>	HILRECVADE	CNKHD	· · AHLIEL · ·	· DKRAR · · · · · · · · · · · · · · · · · ·
Enterobacteria_phage_p22_Regulatory_protein_Arc_PDB-1B28/1-47	MF	POFNLRWPREVLI	DLVRKVAEENGM	••••••••••••••••••••••••••••••••••••••	SYIYQLVMES	KKEG · · ·	RIGA	
Streptococcus_agalactiae_Transcriptional_Repressor_CopG_PDB-2CPG/1-4	5 MK	KRLTITLSESVLI		••••• s Ks	SAMISVALENY	KKGQE···	· · · · R · · · · ·	
Eschenchia_coll_Repressor_MetJ_PDB-1CMA/1-84		KI VSTPLKVL	TLIDERTRRQV	NNLRHATNS	SELLCEAFLHA	GUPLPD	DADLRKERSD	
Enterobactena_phage_p22_Repressor_Nnt_PDB-1NN1/1-76	ARDD		KLKFRAEANGR	<u>SM</u> N	SELLQIVQDA	SKPSP··	VIGYRNDAER	LADEQSELVKKMVFDILKD
		P TEEL DELU	K KILOVTEC	Sic	HIL P. CVODE	- Kun		D. DC
Consensu	s 📗	WY TEL DELH	INLINE UTIESV	UIG	E E E		ANLILL	ID RS
	Mk	RVTFELSDELH	KLKLLCYTESV	· · · · · · SIG	HILROCVSDE	CDKHD	· · AHL EL · ·	. IDKRSKKV
		IPR010985						
		IPR013321						

Figure S1. Multiple sequence alignments of putative transcriptional regulators FciA (A) and FciB (B), both containing an AraC-like α-helix-turn-α-helix (HTH, IPR018060) domain, and FciC (C) with a predicted ribbon-helix-helix (IPR010985 and IPR013321). Shading represents identical amino acid in at least 70% of the sequences. Protein domains, framed by a black rectangle, were determined using InterProScan against *Synechococcus* sp. RS9916 sequences, used as reference. *Ab initio* modeling using Phyre2 indicated that 77% of FciA (263 of 342 residues) and 50% of FciB (158 of 316 residues) from *Synechococcus* sp. RS9916 could be modeled with >90% confidence to the AraC/XylS family. Furthermore, 78% of FciC (42 of 55 residues) were modeled based on the CopG-like family (Gomis-Rüth et al., 1998).

Gomis-Rüth, F.X., Solà, M., Acebo, P., Párraga, A., Guasch, A., Eritja, R. et al. (1998) The structure of plasmid-encoded transcriptional repressor CopG unliganded and bound to its operator. *EMBO J* **17**(24): 7404-7415.