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Hypothesis

Supplementary material

TF	TF binding site	Position	Function	Score	Swiss-Prot ID
cpxR	GTAAATTA	413 - 420	Member of the two-component regulatory system cpxA/cpxR. This system combats a variety of extracytoplasmic protein-mediated toxicities. It performs this function by increasing the synthesis of the periplasmic protease, degP as well as that of cpxP protein.	9	P0AE88 (CPXR_ECOLI)
argR	AATTAATA	416 - 423	Represses the synthesis of biosynthetic enzymes and activates the arginine catabolism. Controls the transcription of the two operons rocABC and rocDEF.	11	P17893 (ARGR_BACSU)

Table 1: Putative transcription factors binding sites within the 5' region of 16SrRNA gene of Bacillus sp. strain SJ-101.

Profile Hit	ZSCORE	Confidence	Protein in fold library
hs2jiga	4.11	Likely	Prolyl-4 hydroxylase - Chlamydomonas reinhardtii
hsd1cpo_2	2.51	Guess	Cloroperoxidase
hs1skha	2.51	Guess	Major prion protein 2 - Bos taurus
hsd1b8ja	2.43	Guess	Alkaline phosphatase
alk_phosphatase	2.40	Guess	Alkaline phosphatase - E. coli
hs1o75a	2.35	Guess	47 kda membrane antigen
hs3c01d	4.11	Guess	Surface presentation of antigens protein spas Salmonella typhimurium

Table 2: Homology of the short protein encoded by the ORF within the 5' region of 16SrRNA gene of *Bacillus* sp. strain SJ-101 using Fold library HOMSTRAD database through FUGUE v2.s.07.