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## **Hypothesis**

## Supplementary material

>extracted region of Acinetobacter sp. ADP1 genome from 17883 to 18443 Length of sequence-561 Threshold for promoters -0.20 Number of predicted promoters -1 5.48 Promoter Pos: 321 LDF--10 box at pos. 306 GAGTAACAT Score -35 box at pos. 287 TTGACT Score 52 287 TTGACT -35 box at pos. 61 Score Oligonucleotides from known TF binding sites: For promoter at 321: TTTAGAGT at position narP: 8 302 Score ompR: GTAACATA at position 308 Score -11 fadR: CCGACCTA at position 317 Score -16

Figure 2: Output of BPROM tool sited at SoftBerry.

TF	TF binding site	Position of TF binding site	Score	Reference	Function
narP	TTTAGAGT	302	8	Swiss-Prot entry P31802	This protein activates the expression of the nitrate reductase (narGHJI) and formate dehydrogenase-N (fdnGHI) operons and represses the transcription of the fumarate reductase (frdABCD) operon in response to a nitrate/nitrite induction signal transmitted by either the narX or narQ proteins.
ompR	GTAACATA	308	11	Swiss-Prot entry P0AA16	The N-terminus of this protein is required for the transcriptional expression of both major outer membrane protein genes ompF and ompC; its C-terminal moiety mediates the multimerization of the ompR protein. As a multimer, it turns on the expression of the ompC gene; as a monomer, it turns on the expression of the ompF gene.
fadR	CCGACCTA	317	16	Swiss-Prot entry A7ZKV8	Multifunctional regulator of fatty acid metabolism

Table 1: Details of Putative TF binding sites with sequence and function found in upstream region of Acinetobacter species 16S rRNA gene.