**Supplementary materials**

**MxyR OF *Mycobacterium tuberculosis* RESPONDS TO XYLAN; AN UNUSUAL LIGAND FOR A MarR FAMILY TRANSCRIPTIONAL REGULATOR#**

**S. Maurana, N. T. Pererab, I. C. Pereraa\***

*aSynthetic Biology Laboratory, Department of Zoology and Environment Sciences, Faculty of Science, University of Colombo, Colombo 03, Sri Lanka*

*bDepartment of Chemistry, Faculty of Applied Sciences, University of Sri Jayewardenepura, Nugegoda, Sri Lanka*

*\*e-mail: icperera@sci.cmb.ac.lk*

**Table S1. sequences of synthetic oligonucleotides used in the current study**

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| Primer | Sequence |
| MxyR\_Fw | 5′ ACA GAATTC ATG GCC GTT TCC GAT CTA TCC 3′ |
| MxyR\_Rv | 5′ ACG GAATTC TTA TGA GGA CGC CAG CTT GG 3′ |
| *mxyO*Fw | 5’ CGA TCT CGG TTT CGC TTT GGT TCA C 3’ |
| *mxyO*Rv | 5’ TGG GAT AGA TCG GAA ACG GCC AT 3’ |
| PP1 Fw | 5′ AGT TTC ACA GAG TCA GTG CTC CTG ATG ACG GTG GCG GTT CAA TAC GTG TCA CTG TGC AGT CG 3′ |
| PP1 Rv | 5′ CGA CTG CAC AGT GAC ACG TAT TGA ACC GCC ACC GTC ATC AGG AGC ACT GAC TCT GTG AAA CT 3′ |
| PP2 Fw | 5′ CTA GGA CTC GAC TGC AGC ATG AAG TTA CCA CCC TTG GTT CAG GCT TAC GTG TCA GCG ATC 3′ |
| PP2 Rv | 5′ GAT CGC TGA CAC GTA AGC CTG AAC CAA GGG TGG TAA CTT CAT GCT GCA GTC GAG TCC TAG 3′ |
| PP3 Fw | 5′ CTA GGA CTC GAC TTC AGC TGG TTC AGT CAT TGA ACC ACA GGC TTA CGT GTC AGC GAT C 3′ |
| PP3 Rv | 5′ GAT CGC TGA CAC GTA AGC CTG TGG TTC AAT GAC TGA ACC AGC TGA AGT CGA GTC CTA G 3′ |
| PP4 Fw | 5′ GTC CGT TGA GAC GTA CAG ACC TGA CCA GGT ACA GTT GGT GGA CCA TGG CCG TGT CCG ATC TAT AC 3′ |
| PP4 Rv | 5′ GTA TAG ATC GGA CAC GGC CAT GGT CCA CCA ACT GTA CCT GGT CAG GTC TGT ACG TCT CAA CGG AC 3′ |

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**Figure S1.** MxyR Model validation by Ramachandran’s plot. It shows that majority of the residues (91.5%) are in the favored region of the plot.



**Figure S2. Binding of xylooligosaccharides towards MxyR. a:** Challenging MxyR-*mxyO* complex with increasing concentrations of xylooligosaccharides xylobiose and xylotriose. First lane of each gel represents the free DNA, the second lane represents fifty percentage of MxyR-*mxyO* complex in equilibrium condition and the rest of the lanes are MxyR-*mxyO* complex in the presence of increasing concentrations of xylooligosaccharides (4, 6, 8 and 10 µg/ µl). **b:** MxyR-*mxyO* complex formation as a function of increasing xylooligosaccharide concentration. Error bars represents standard deviation (SD) of three independent experiments.