

Poster Presentation

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LipL41, a Hemin Binding Protein from Leptospira santarosai

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Leptospirosis, a widespread zoonotic disease, is caused by pathogen *Leptospira*. Outer membrane lipoprotein is the potential virulence factor of *Leptospira*. LipL41 is one of the major lipoprotein and highly conserved in *Leptospira* spp. Previous study suggests that LipL41 bears hemin binding ability and might have a possible role in iron regulation and storage. The hemin binding ability of LipL41 is determined with a $K_d = 0.59 \pm 0.14 \mu\text{M}$. Two possible heme regulatory motifs (HRMs), C[P/S], are found in LipL41 as 140Cys-Ser and 220Cys-Pro. A supramolecular assembly of LipL41 was determined by transmission electron microscopy. At the C-terminus of LipL41, there are two tetratricopeptide repeats (TPRs), which might involve in the protein-protein interaction of the supramolecular assembly

[1] M.H. Lin, Y.C. Chang, C.D. Hsiao, S.H. Huang, M.S. Wang, Y.C. Ko, C.W. Yang and Y.J. Sun* (2013) *PLoS One*. 8(12): e83246

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