CHARACTERIZATION OF RECOMBINANT FLAGELLIN B PROTEIN FROM *LEPTOSPIRA INTERROGANS*

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Abstract. Symptoms of the early phase leptospirosis often are non-specific and can be a major problem in making a diagnosis of febrile illnesses. Rapid diagnosis of leptospirosis is of extreme importance, because antibiotic treatment provides greatest benefit when administered in early stage of the disease. Recombinant flagellin B (FlaB) gene (*flaB*) of *Leptospira interrogans* serovar Autumnalis strain Akiyami A was heterologously expressed and purified. The 35 kDa recombinant FlaB was 99% similar to the reference strain in GenBank. Rabbit polyclonal anti-recombinant FlaB antibodies recognized using immunoblotting yielded 35-36 kDa doublet from one saprophytic and eight pathogenic *Leptospira* serovars. Western blot assay showed that recombinant FlaB could distinguish leptospirosis from non-leptospirosis sera. This recombinant FlaB can be used in serodiagnosis of leptospirosis and identification of *Leptospira* spp.

Keywords: *Leptospira*, flagellin B, recombinant protein, serodiagnosis

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