

# **BURKHOLDERIA THAILANDENSIS WHOLE CELL ANTIGEN CROSS-REACTS WITH *B. PSEUDOMALLEI* ANTIBODIES FROM PATIENTS WITH MELIOIDOSIS IN AN IMMUNOFLUORESCENT ASSAY**

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**Abstract.** An immunofluorescent assay (IFAT) using whole cell antigen derived from *Burkholderia thailandensis* used for detection of total antibodies to *Burkholderia pseudomallei*, was found to compare favorably with a previous published report on a *B. pseudomallei* IFAT assay. At a 1:20 cut-off titer, the assay had high sensitivity (98.9%) and satisfactory specificity (92.3%), when tested against sera from 94 patients suspected of melioidosis. Sera from 12 patients with culture proven melioidosis gave absolute concordance with the 2 test antigens. No sera from 50 blood donors had a titer of  $\geq 20$ . Cross-reactivity with patients' sera positive for Chlamydia, Mycoplasma, Legionella and typhoid was not observed, except for 3 sera from typhus patients and one from a patient with leptospirosis. The major advantage of this assay is that the cultivation and preparation of *B. thailandensis* as antigen can be carried out in any laboratory with basic microbiological set-up. The serodiagnosis of melioidosis can be made safe for medical laboratory personnel, particularly in *B. pseudomallei* endemic regions.

**Key words:** *Burkholderia thailandensis*, *B. pseudomallei*, whole cell antigen, melioidosis, IFAT

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