

EXPRESSION AND PURIFICATION OF 30 KILODALTON PROTEIN ANTIGEN OF ARA⁻ *BURKHOLDERIA PSEUDOMALLEI*

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Abstract. The 30 kDa protein of *B. pseudomallei* is found in virulent Ara⁻ but not avirulent Ara⁺ strain. The gene was cloned in *Escherichia coli* JM105 employing pInIII-C2 vector. The open reading frame was 870 nucleotides with a guanine plus cytosine content of 69.9%. Arginine was the most abundant amino acid in the protein, having a PI of 12.65. Nucleotide sequence of the gene was 96% identical to *B. pseudomallei* 1710b chromosome II sequence CP000125.1, encoding an oxidoreductase of the short chain dehydrogenase/reductase family. The 30 kDa antigen was expressed as a maltose-fusion protein with a yield of 5.25 mg/l of bacterial culture.

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