## **Abstract**

Our results demonstrated that the purified F1 protein is suitable for PHA assay and is effective to be an antigen to raise a specific anti-F antiserum. Also, in conjunction with PHA to examine the anti-F1 antibody serologically, screening for the potential caf1 DNA by PCR provide an effective and yet sensitive system for plaque surveillance.

Key Word: Yersinia pestis · Capsule fraction 1 · F1 · PHA · Immunofluorescence · PCR · caf1 · Affinity chromatography