

## **Abstract**

**The local isolated Enterovirus 71 (EV71) strains were adapted in Vero cells. The virus titers of the ten strains of EV71 grown in Vero cells were up to  $10^6$ - $10^7$  50% Tissue Culture Infection Dose (TCID<sub>50</sub>). Formalin, as an inactivating agent, was good for kill viruses and preserve the immunogenicity of the viruses. The concentration of Formalin was estimated as 1/4000 or 1/2000. Aluminium adjuvants as the component of EV71 proto-vaccine, AlPO<sub>4</sub> and Al(OH)<sub>3</sub>, were selected to enhance the antibody generation. The proper pH values of two adjuvants were determined by neutralization antibody titers. The higher antibody titer was at least 1:100 for the pH=7.5. The suitable vaccine strain was selected by the cross-neutralization test. We found 3 strains were possible to be a good immunogen to protect from other EV71 by neutralization antibodies. The differences between the 3 strains were investigated continuously to identify the fine vaccine strain.**

**Key Word : Enterovirus type 71 、 Aluminium adjuvant 、 Virus inactivating agent**