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## Adjuvant Activity of Synthetic Cationic Amphiphiles for Production of IgG Antibody in Sprague Dawley Rats

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12GP2 and 14GP2, synthetic cationic amphiphiles, were examined in Sprague-Dawley rats for their adjuvant activity with ovalbumin (OVA) as antigen. Findings were compared with the activity of complete Freund's adjuvant (CFA) and aluminum hydroxide (Alum). Both amphiphiles induced OVA specific IgG comparable to the conventional adjuvants CFA or Alum, and total IgG levels of 12GP2 and 14GP2 groups were lower than the levels of other conventional adjuvants or with no adjuvant. Induction of OVA specific IgA and IgM were not observed. Examination of the effect of these adjuvants on T cell population of spleen lymphocytes showed that. CD4<sup>+</sup>/CD8<sup>+</sup> ratio, CD4<sup>+</sup> populations and CD8<sup>+</sup> populations in rats immunized with the four adjuvants differed. Therefore, these adjuvants have different mechanisms for exerting immunoadjuvant activities.

**Keywords:** [adjuvant](#), [liposome](#), [cationic amphiphiles](#), [complete Freund's adjuvant](#), [aluminum hydroxide](#)

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