

Augmented Induction of Antigen-Specific Cytotoxic T Cell Responses against Canine Hepatitis by Co-Immunization with pVAX1-CpG-Loop and Adjuvants in BALB/c Mice

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Abstract :

The objective of this study was to obtain better antigen specific cytotoxic T cell responses *in vivo*. We examined the augmented induction of antigen-specific cytotoxic T cell responses to co-administration of oligonucleotides (CpG-ODN), dimethyl dioctadecyl ammonium bromide (DDA), and Lipofectamine™ 2000 with a DNA vaccine (pVAX1-CpG-Loop) and boosting with pVAX1-CpG-Loop in BALB/c mice. The results show that Loop protein-specific T cell proliferation, cytotoxic T cell activity, and the production of CD8+ T cells and IFN- γ were enhanced after co-immunization of mice with adjuvants and pVAX1-CpG-Loop. We demonstrated that significant T cell-mediated immune responses were induced in the mice with the help of DDA, CpG-ODN and Lipofectamine™ 2000.

Key Word :

adjuvants, BALB/c mice, cytotoxic T cell responses, plasmid pVAX1-CpG-Loop

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