

IF01-4N/IF01-20N

ImmunoFast Adjuvant

Introduction

ImmunoFast is an adjuvant used to induce produce cell mediated and humoral responses in research animals. **ImmunoFast Adjuvant** is invented for researches where strong and fast immune response is needed. In comparison with Freund's Complete Adjuvant (CFA) or other adjuvants, ImmunoFast is a much safer and easier one.

The crucial point of its strength is the immunostimulatory activity of its components. ImmunoFast enables the steady and intense induction of antibodies against antigens within research animals. Similar to CFA, **ImmunoFast** can be used with a wide variety of antigens. It is worth noting that ImmunoFast is effective in inducing antibody production, but without the toxicity as CFA. ImmunoFast is an attractive alternative to CFA in the induction of high titer, high avidity antibodies.

Introduction

ImmunoFast can elicit much stronger immunoreponse in animals than other adjuvants, such as CFA. After performing a regular immunization procedure on mice (three boosts for 6weeks), ImmunoFast (Figure 1, closed triangle) deliver approximate 10 fold stronger titer than CFA (Figure 1, opened triangle).

However, the most attractive feature from **ImmunoFast** is that it can elicit strong immunoresponse in a very short of period, for those antigens hard to elicit immunoreponse. Within two weeks after the first immunization, **ImmunoFast** (Figure 1, closed circle) elicit 100,000 fold stronger immunoresponse in animals, as compared to CFA (Figure 1, opened circle).

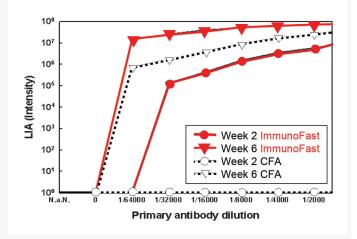


Figure 1 The comparison of immunoresponse elicited by ImmunoFast and CFA at week 2 and 6 after first immunization.

Introduction

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Generally, employing **ImmunoFast** may induce significant immunoresponse within 2 weeks, and reach to plateau at 4 weeks (Figure 2, closed circle). As compared to the traditional CFA, which may take at least 4 weeks for eliciting proper immunoresponse (Figure 2, opened circle), **ImmunoFast** dramatically saves precious time of research without sacrifice of the antibody titer.

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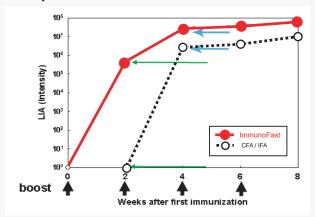
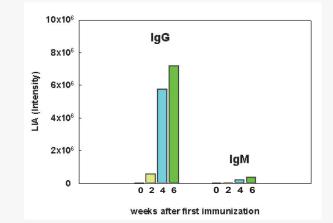


Figure 2 Time needed for ImmunoFast and CFA/IFA to induce apparent immunoresponse.

Employing **ImmunoFast**, on the other hand, a significant class switch from IgM to IgG has almost been completed (Figure 3). It means that the spectrum of antibodies is the desirable IgG dominantly.



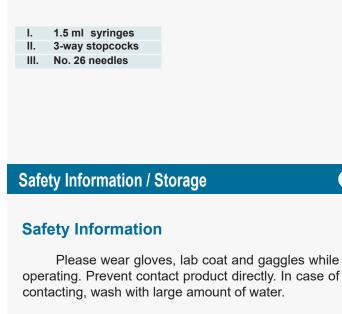
Product Components

ImmunoFast Adjuvant

IF01-4N

Reagent 1	0.1 ml	1 bottle
Reagent 2	1.5 ml	1 bottle
User's manual		1 booklet
IF01-20N		
Reagent 1	0.5 ml	1 bottle
Reagent 2	7.0 ml	1 bottle
User's manual		1 booklet

Materials needed but not provided



Storage

ImmunoFast is stable and can be stored at room temperature for years.

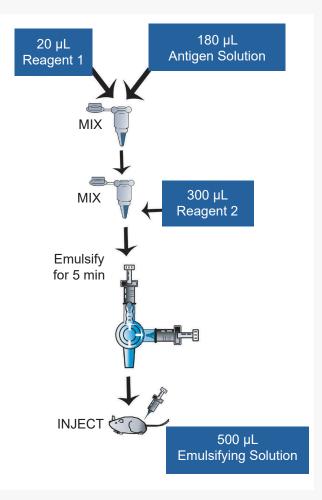
Instruction

(4)

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- 1. Pre-mix 20 µl reagent 1 + 180 µl antigen solution (in water or PBS).
- 2. Mix the above solution with 300 µl reagent 2.
- 3. Emulsify for 5 minutes by syringes.
- 4. Immunize the animal with total 500 µI emulsifying solution whichever appropriate method.
- 5. Evaluate the titer for animals every two weeks by ELISA or other methods.



Note

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- 1.Generally, strong titer can be elicited after two weeks of the first immunization. A stronger immunization can be found if performing a second immunization.
- 2. 10 to 50 μg of antigen in each boost should be sufficient for successful immunization. However, due to the divergence among antigens, optimal amount of required antigen might vary and should be determined by users.
- 3. Unlike other adjuvants, the emulsifying solution from ImmunoFast is water like and thus permits users with an ease immunization procedure.



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