Standard Operating Procedure

SOP Number: 02-18-5812
Service: Research
Operating Section: IACUC
Unit: LUC/HSD
Title: Use of Rodents and Rabbits in Antibody Production

Purpose:
To provide guidelines for minimizing pain and distress to rodents and rabbits used in antibody production. The following are considered the recommended practices by the IACUC; deviations from these guidelines require specific justification in the animal protocol.

Procedure:

1) Principal investigators must justify the use of animals for the production of antibodies, using specific references to explain why *in vitro* methods are inappropriate.

2) Alternatives to Complete Freund's Adjuvant (CFA), such as RIBI, Titer Max, etc., must be considered. If used, CFA can only be injected once per animal. Incomplete Freund's Adjuvant (IFA) will be used for subsequent booster immunizations. Immunogens should be separated as completely as possible from polyacrylamide gels or other separation media. The amount of adjuvant in the injection should be minimized.

3) Hair should be clipped from intradermal and subcutaneous injection sites and the site should be aseptically prepared with betadine, Nolvasan scrub or other appropriate antiseptic followed by isopropyl alcohol.

4) Recommended injection sites and volumes include:
   a) subcutaneous: 0.10 ml in mice and rats (2-4 sites), 0.2 ml in rabbits (3-5 sites)
   b) intradermal: 0.05 ml in rabbits (10-20 sites)
   c) intraperitoneal: 0.10 ml in mice and rats
   d) intravenous: cannot use adjuvant
   e) intramuscular: should be avoided
   f) footpad: not allowed

5) Subcutaneous and intradermal injections should be given in the dorsal thoracic and lumber regions, avoiding the cervical and intrascapular regions, which may interfere with handling.

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Version          Effective Date    Supersedes   Original Date
#2               03/21/02          #1               03/21/02