

ALL CAMPUS ANIMAL CARE & USE COMMITTEE POLICY

Policy Number: 1999-011
Adoption Date: 12/14/99
Effective Date: 12/14/99
Expiration Date: ongoing
Review Date: Annually in January

Title: General Guidelines for Antibody Production in Mammals

Purpose: This policy is intended to provide guidance to researchers involved in antibody production utilizing animals. It is the intent of this policy to promote the use of in vitro methods whenever possible. No matter the species, the highest standards of animal care must be followed while engaging in antibody production in vivo.

Policy:

Researchers utilizing animals for the production of polyclonal antibodies must carefully consider all aspects of antibody production: antigen preparation; selection of animal species; selection and preparation of the adjuvant; injection protocol; postinjection observation (for assessment of potential pain and distress); and collection of the antibodies.

Considerations in the production of monoclonal antibodies include the immunization of animals to generate antigen-specific B cells (which includes the above steps), and the production of monoclonal antibodies, either in vivo or in vitro. The National Research Council Report (1999) on monoclonal antibody production stated that, due to the need to minimize pain and suffering for animals, that in vitro methods for monoclonal antibodies should be adopted unless there was a clear scientific reason to use the in vivo method.

References:

Committee on Methods of Producing Monoclonal Antibodies, Institute for Laboratory Animal Research, National Research Council. Monoclonal Antibody Production. National Academy Press, Washington, DC. 1999.
http://books.nap.edu/openbook.php?record_id=9450

Leenaars M, and Hendriksen, CFM. Critical Steps in the Production of Polyclonal and Monoclonal Antibodies: Evaluation and Recommendations. ILAR Journal 46(3), 2005.
http://dels.nas.edu/ilar_n/ilarjournal/46_3/html/v4603Leenaars.shtml

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