

Justification of Animal Numbers (should not be justified on the basis of how many experiments can perform in a week, month, etc. The cost of the animal should not be considered as the primary justification.)

Types of experimental study /Justification narrative

(MARK in COL-1 , DESCRIBE the narrative in Col-3 and tabulate the animal numbers in Table 1)

<p>Teaching Protocols</p> <p><input type="checkbox"/></p>	<p>Animal numbers are determined by a specified student-to-animal ratio.</p> <p>Animal numbers should be minimized to the fullest extent possible without sacrificing the quality of the hands-on teaching experience for students.</p>	<p>Justification narrative:</p>										
<p>Tissue Harvest (including antibody production):</p> <p><input type="checkbox"/></p>	<p>Animal numbers are determined by the amount of tissue , antibodies, etc. required</p> <p>A detailed explanation of how the required number of animals was determined must be included in the justification narrative.</p>	<p>Justification narrative:</p>										
<p>Exploratory Study Requiring No Statistical Analysis</p> <p><input type="checkbox"/></p>	<p>The use of live animals to demonstrate success or failure of a desired objective, such as the production of transgenic mice.</p> <p>Animal numbers are justified based on the probability of success of the experimental procedure; a detailed explanation of how that probability was determined must be included in the narrative.</p>	<p>Justification narrative:</p>										
<p>Pilot Studies:</p> <p><input type="checkbox"/></p>	<p>Animal numbers are determined by the investigator’s experience and personal judgment, and are typically small.</p> <p>Data collected in pilot studies are generally used to determine statistically sound sample size calculations for future experiments.</p>	<p>Justification narrative:</p>										
<p>Studies Requiring Inferential Statistical Analysis:</p> <p><input type="checkbox"/></p>	<p>1) Animal numbers are determined by power analysis; the justification statement must include the values of alpha, beta, sigma, and effect size used in the power analysis to determine sample size.</p> <p>2) Animal numbers may be determined based on pertinent literature for comparable studies in which the desired effect sizes were shown to be statistically significant.</p>	<p>Based on statistical power analysis:</p> <table border="1" data-bbox="841 1514 1466 1665"> <thead> <tr> <th>Alpha(α)</th> <th>Beta (β)</th> <th>Sigma (σ)</th> <th>Effect size</th> <th>Replication /group</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table> <p>Based on pertinent literature for comparable studies: Include full citation:</p> <hr/> <hr/> <hr/>	Alpha(α)	Beta (β)	Sigma (σ)	Effect size	Replication /group					
Alpha(α)	Beta (β)	Sigma (σ)	Effect size	Replication /group								

Table 1 (Tabulate the animal number requirement in the following table)

Sample table:

Animal Species: _____

Experimental study identification (by number or name):				
Experimental groups	Number of replications/ group	Different time points (weeks, months, year) * Different animals are required at each time intervals	Different study parameters * Different animals are required to measure multiple responses	Animal count
1) Control	5	5 weeks	0	25
2) Treatment 1	6	5 weeks	0	30
3) Treatment 2	6	5 weeks	0	30
4) Treatment 3	6	5 weeks	0	30
Add more rows as required				
Total				115
Possible loss (5%)				8
Total animals requested				123

(Add more tables to tabulate animal numbers in other experiments within the same protocol)

Additional comments:

