

**West Texas A&M University
Institutional Biosafety Committee**

Appendix A. Recombinant DNA/Viral Vectors

- 1. Enter host (target) name (e.g. *Mus musculus*) and information into Table A of Part II of the IBC Application form.**
- 2. Enter vector name, if used (e.g. adeno-associated virus (AAV)) and information into Table A of Part II of the IBC Application form.**
- 3. Enter information regarding the cloned DNA insert (e.g. insulin) into Table B below:**

Table B. Insert Characteristics.

In Table B below, enter information about each vector or host DNA insert. Enter the appropriate Host ID from Table A in the full protocol form, to indicate which host will contain the insert.

| Insert ID | Host ID (from Table A) | Source of Insert (Ex: human) | Insert Source Risk Group | Insert Name (Ex: insulin) | Insert Characteristic/Function (Ex: hormone) |
|-----------|------------------------|------------------------------|--------------------------|---------------------------|--|
| I-1 | A- | | | | |
| I-2 | A- | | | | |
| I-3 | A- | | | | |
| I-4 | A- | | | | |
| I-5 | A- | | | | |
| I-6 | A- | | | | |
| I-7 | A- | | | | |
| I-8 | A- | | | | |
| I-9 | A- | | | | |
| I-10 | A- | | | | |

- 4. Which sections of the NIH Guidelines does the research or teaching described in this protocol fall? (Choose all that apply for each agent.)**

| Agent ID (from Table A) | Agent Genus, Species | Strain | BSL/ABSL/BL-P | Sections of the NIH Guidelines that cover research/teaching. (See below; include all that apply.) |
|-------------------------|----------------------|--------|---------------|---|
| A-1 | | | | |
| A-2 | | | | |
| A-3 | | | | |
| A-4 | | | | |
| A-5 | | | | |
| A-6 | | | | |
| A-7 | | | | |
| A-8 | | | | |
| A-9 | | | | |
| A-10 | | | | |

Rules pertaining to Sections III-A, III-B, III-C, III-D, III-E, and III-F of the *NIH Guidelines* can be found at:

https://osp.od.nih.gov/wp-content/uploads/NIH_Guidelines.html#_Toc446948316

5. Insert Characteristics: Please answer the following questions regarding the inserts listed in Part II.

Yes No

From a Risk Group 2 Agent?

From a Risk Group 3 or 4 Agent?

From an animal or plant pathogen not affecting humans?

Encodes for a known or suspected oncogene?

Encodes for a toxin molecule (whole or partial)? If yes, please describe the LD50 of the toxin and whether the insert will code for an active toxin.

Will antibiotic resistance be transferred to microorganisms? If Yes:

- Describe what antibiotic resistance genes will be transferred to which agents.

- Explain why this action would not fall under Section III-A-I of the NIH Guidelines. Include relevant references.

6. Viral Vector Information: If viral vectors are used, complete this section separately **for each viral vector.**

Agent ID from Table A on the full protocol form: _____

- Is the virus replication competent? Yes No
- Are assay systems used to measure the titer of replication of competent viruses that may be present? Yes No

If Yes, please describe:

- What percent of the original viral genome remains in the vector? _____
- Describe the genome organization of the viral vector. Include information about what genes or genome regions have been removed.
- The possibility of homologous recombination with endogenous viruses exists. Indicate the reversion rate and the recombination event of such a possibility. Describe methods you will use to ensure that replication of competent viruses is excluded.