

Case Western Reserve University Institutional Biosafety Committee Policy on the Use of Adenovirus Vectors

Adenoviral vectors provide a relatively safe and effective means of delivering genetic material into a target cell or tissue. **It should be noted that adenovirus DOES NOT need to be replication competent to cause corneal damage or conjunctivitis and should always be handled with the utmost care.** Proper personal protective equipment and good microbiological technique are mandatory. The CWRU Institutional Biosafety Committee has created the following policy in an effort to provide consistency for our investigators utilizing Adenoviral vectors in their research.

Required information on the IBC Protocol Form:

1. Packaging cell line, Adenoviral vectors backbone, insert and co-transfected plasmids that provide packaging proteins in trans.

Virus Risk Group and Containment requirements:

- 1) Guidelines for research involving adenoviral vectors:
 - a. Animals should be maintained under BL2 containment for 72 hours after infection. Afterwards, the animals can be moved to a BL1 facility but potentially contaminated cages, bedding and food should be decontaminated and treated as biohazardous waste.
 - b. Cells in culture infected with adenoviral vectors should be maintained under BL2 containment. Potentially infected medium and plasticware should be decontaminated and treated as biohazardous waste.

Viral Preparation and handling:

1. Viral preparation should be performed in a certified hood in a BL2 room and cells must be maintained under BL2 conditions while the virus is being packaged and secreted into the medium.
2. Whether in animals or cell lines, the handling of adenoviral vectors should be done under BL2 containment conditions and a biosafety cabinet should be utilized when possible.