
MATERIAL SAFETY DATA SHEET

— INFECTIOUS SUBSTANCES

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Recombinant Adenovirus Vectors

- **SECTION 1– INFECTIOUS AGENT:**

PRODUCT IDENTIFICATION:

All pre-made recombinant adenovirus vectors made by ATCGbio Laboratories Inc.

BIOLOGICAL NAME:

Recombinant Adenovirus vectors derived from the type 5 adenovirus

CHARACTERISTICS:

The recombinant adenoviruses, non-enveloped, icosahedral virions, 75-80nm diameter, doubled stranded and linear DNA genome, are based on human type-5 adenoviral backbone that is deleted in the essential E1 gene as well as the E3 gene. The viruses produced are incapable of autonomously reproducing itself (non-replicative).

- **SECTION 2– HEALTH HAZARD**

PATHOGENICITY:

Varies in clinical manifestation and severity; symptoms include fever, rhinitis, pharyngitis, cough and conjunctivitis. The risk from infection by defective recombinant adenoviral vectors depends both on the dose of virus and on the nature of the transgene. Adenovirus does not integrate into the host cell genome but can produce a strong immune response.

HOST RANGE: Humans and animals

INCUBATION PERIOD: from 1-10 days

MODE OF TRANSMISSION:

In the laboratory, care must be taken to avoid spread of infectious material by aerosol, direct contact or accidental injection

CHEMICAL LISTED AS CARCINOGEN OR POTENTIAL CARCINOGEN: None

- **SECTION 3– VIABILITY**

DRUG SUSCEPTIBILITY: No specific antiviral available

SUSCEPTIBILITY TO DISINFECTANTS: Susceptible to 1% sodium hypochlorite, 2% glutaraldehyde. Recommend use of 1/3 volume of bleach for 30 minutes.

PHYSICAL INACTIVATION: Sensitive to heat; 1 hour at 56°C is used to inactivate virus.

SURVIVAL OUTSIDE HOST: Recombinant adenovirus survived from several weeks under normal environmental conditions.

- **SECTION 4– MEDICAL**

SURVEILLANCE: Monitor for symptoms; confirm by serological analysis

FIRST AID/TREATMENT:

Contact: Immediately flush eyes and skin with plenty of water for at least 15 minutes. Call a physician.

Inhalation: N/A

Ingestion: Wash out mouth with water. Call a physician

Accidental injection: wash area with soap and water. Call a physician.

- **SECTION 5– ACCIDENTAL RELEASE PROCEDURES**

METHODS FOR CLEANING UP

Pour 1 volume of Javel water over the leak(s) and wait for 15 minutes.

Wipe up carefully.

Hold for autoclave waste disposal and decontaminate work surfaces with 70% alcohol.

- **SECTION 6– RECOMMENDED PRECAUTIONS**

CONTAINMENT REQUIREMENTS: Biosafety level 2 practices and containment facilities for all activities involving the virus and potentially infectious body fluids or tissues. This level consists of etiological agents considered to be of ordinary potential harm.

PROTECTIVE CLOTHING: Recombinants Adenovirus: Laboratory coat; gloves.

OTHER PRECAUTIONS:

Access to the laboratory is limited.

Work surfaces are decontaminated before and after each procedure

Mechanical pipetting devices are used for all procedures; mouth pipetting is prohibited.

Eating, drinking and smoking are not permitted in the laboratory; food is not stored in laboratory areas.

Laboratory coats are worn in and are removed before leaving the laboratory.

Hands are washed before and after handling virus.

- **SECTION 7– HANDLING INFORMATION**

DISPOSAL: Decontaminate all wastes before disposal; steam sterilization

STORAGE: The sealed containers should be labeled appropriately

- **SECTION 8– MISCELLANEOUS INFORMATION**

The above information and recommendations are believed to be accurate and represent the most complete information currently available to Canada and US. All materials and components may present unknown hazards and should be used with caution. ATCGbio Life Technology Inc. assumes no liability resulting from use of the above products.