

MATERIAL SAFETY DATA SHEET Replication-Defective Recombinant Adenovirus Vectors

EMERGENCY TELEPHONES: 301-251-6638 or 1-800-485-5808

SECTION I

Infectious Agent

PRODUCT IDENTIFICATION: All adenovirus type 5 (Ad5) vectors made by Vigene Biosciences, Inc.

BIOLOGICAL NAME: recombinant adenovirus vector type 5

<u>CHARACTERISTICS</u>: Adenoviridae; non-enveloped, icosahedral virions, 75-80 nm diameter, double stranded, linear DNA genome. The recombinant adenovirus vectors are based on the human adenoviral type 5 backbone with deletions in the essential E1 gene and the E3 gene; therefore recombinant adenoviruses produced are non-replicative.

PROVIDED: Liquid or frozen particle suspensions

SECTION II

Health Hazards

<u>PATHOGENICITY</u>: 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

FIRE AND EXPLOSION: None

SECTION III

Viability

<u>DRUG SUSCEPTIBILITY</u>: No specific antiviral available

<u>SUSCEPTIBILITY TO DISINFECTANTS</u>: 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.

<u>SURVIVAL OUTSIDE HOST</u>: Recombinant adenovirus survived from several weeks under normal environmental conditions

SECTION IV

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 V

Accidental Release Procedures

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 VI

Recommended Precautions

<u>CONTAINMENT REQUIREMENTS</u>: Biosafety level (BSL)-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: Laboratory coat; gloves; goggles

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 VII

Handling Information

DISPOSAL: Decontaminate all wastes before disposal; steam sterilization

STORAGE: In sealed containers that are appropriately labeled. Long-term storage at -80°C

SECTION VIII

Miscellaneous Information

The above information is accurate to the best of our knowledge. All materials and mixtures may present unknown hazards and should be used with caution. The user should exercise independent judgment as to the hazards based on all sources of information available. Vigene Biosciences, Inc. shall not be held liable for any damage resulting from the handling or use of the above product.

Date of revision: Jan 7, 2019