

## Bear Canyon Virus, VH-C067

### Catalog No. NR-12235

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### For research use only. Not for human use.

#### Contributor and Manufacturer:

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#### Product Description:

Virus Classification: *Arenaviridae*, *Mammarenavirus*

Species: *Bear Canyon mammarenavirus*

Strain: VH-C067

Original Source: Bear Canyon virus (BCNV), was first isolated from California mice (*Peromyscus californicus*) captured near the Riverside-Orange County line in California, USA in 1998.<sup>1</sup> Detailed information on the origin of the VH-C067 strain is not available.

Comments: The taxonomy of the family *Arenaviridae* has recently been revised with the creation of a new genus (*Reptarenavirus*) and the renaming of the genus *Arenavirus* as *Mammarenavirus*. To remove ambiguity between species and virus names, previously accepted species names were replaced with non-Latinized binomial names distinct from the virus names. Thus, *Bear Canyon mammarenavirus* is the new taxonomic home of BCNV.<sup>2</sup>

Although BCNV was originally isolated from the California mouse, later studies indicated that the big-eared woodrat (*Neotoma macrotis*) is the principal host.<sup>3</sup> BCNV is a Tacaribe serocomplex virus.<sup>4</sup> Although BCNV has not been definitively associated with human infections, Tacaribe complex viruses native to North America are implicated as causative agents of human disease in the United States.<sup>5</sup>

#### Material Provided:

Each vial contains approximately 1 mL of clarified supernatant from *Cercopithecus aethiops* kidney epithelial cells (Vero E6; ATCC® CRL-1586™) infected with Bear Canyon virus, VH-C067.

Note: If homogeneity is required for your intended use, please purify prior to initiating work.

#### Packaging/Storage:

NR-12235 was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen and should be stored at -60°C or colder immediately upon arrival. For long-term storage, the vapor phase of a liquid nitrogen freezer is recommended. Freeze-thaw cycles should be avoided.

#### Growth Conditions:

Host: Vero E6 cells (ATCC® CRL-1586)

Growth Medium: Eagle's Minimum Essential Medium containing 2 mM L-glutamine, 1 mM sodium pyruvate, and 1500 mg/mL sodium bicarbonate, supplemented with 2% fetal bovine serum

Infection: Cells should be 60% to 90% confluent

Incubation: 10 to 14 days at 37°C and 5% CO<sub>2</sub>

Cytopathic Effect: None observed

#### Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Bear Canyon Virus, VH-C067, NR-12235."

#### Biosafety Level: 3

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. Biosafety in Microbiological and Biomedical Laboratories. 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see [www.cdc.gov/biosafety/publications/bmb15/index.htm](http://www.cdc.gov/biosafety/publications/bmb15/index.htm).

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**References:**

1. Fulhorst, C. F., et al. "Bear Canyon Virus: an Arenavirus Naturally Associated with the California Mouse (*Peromyscus californicus*)." Emerg. Infect. Dis. 8 (2002): 717-721. PubMed: 12095441.
2. [ICTV Taxonomy History for Bear Canyon mammarenavirus](#)
3. Milazzo, M. L., et al. "Epizootiology of Tacaribe Serocomplex Viruses (*Arenaviridae*) Associated with Neotomine Rodents (*Cricetidae*, *Neotominae*) in Southern California." Vector Borne Zoonotic Dis. 15 (2015): 156-166. PubMed: 25700047.
4. Cajimat, M. N., et al. "Diversity and Phylogenetic Relationships among the North American Tacaribe Serocomplex Viruses (Family *Arenaviridae*)." Virology. 421 (2011): 87-95. PubMed: 21982818.
5. Milazzo, M. L., G. L. Campbell, and C. F. Fulhorst. "Novel Arenavirus Infection in Humans, United States." Emerg. Infect. Dis. 17(2011): 1417-1420. PubMed: 21801618.

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