

## Kaeng Khoi Virus, PSC-19

### Catalog No. NR-15772

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

#### Contributor and Manufacturer:

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#### Product Description:

Virus Classification: *Bunyaviridae*, *Orthobunyavirus*

Species: Kaeng Khoi virus

Strain: PSC-19

Original Source: Kaeng Khoi virus (KKV), PSC-19 was isolated from pooled liver and fat tissue from bats (*Tadarida plicata*) collected in Kaeng Khoi District, Thailand, in 1969.<sup>1,2</sup>

Comments: KKV species have been isolated from bats (*Tadarida plicata* and *Chaeriphone plicata*) as well as bedbugs (*Striticimex parvus* and *Cimex insuetus*). KKV is of potential public health concern, as the virus displays higher pathogenicity in bats and mice than is normally associated with *Orthobunyavirus* species, and neutralizing antibodies have been found in the sera of Thai people who work in bat caves.<sup>1-3</sup> Complete nucleotide sequences of the small (S; GenBank: KJ867203), medium (M; GenBank: KJ867204), and large (L; GenBank: KJ867205) RNA genome segments of KKV have been determined.<sup>2</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 KKV, PSC-19.

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

#### Packaging/Storage:

NR-15772 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 70% to 90% confluent.

Incubation: 3 to 8 days at 37°C and 5% CO<sub>2</sub>

Cytopathic Effect: Cell rounding and sloughing.

#### Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Kaeng Khoi Virus, PSC-19, NR-15772."

#### Biosafety Level: 2

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:

- Williams, J. E., et al. "Kaeng Khoi Virus from Naturally Infected Bedbugs (cimicidae) and Immature Free-Tailed Bats." Bull. World Health Organ. 53 (1976): 365-369. PubMed: 1086729.

2. Groseth, A., et al. "Molecular Characterization of Human Pathogenic Bunyaviruses of the Nyando and Bwamba/Pongola Virus Groups Leads to the Genetic Identification of Mojuí dos Campos and Kaeng Khoi Virus." PLoS Negl. Trop. Dis. 8 (2014): e3147. PubMed: 25188437.
3. Osborne, J. C., et al. "Isolation of Kaeng Khoi Virus from Dead *Chaerephon plicata* Bats in Cambodia." J. Gen. Virol. 84 (2003):2685-2689. Pubmed: 13679602.

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