Ectromelia Virus Expressing Murine Interleukin-4

Catalog No. NR-791

For research use only. Not for human use.

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Manufacturer:
BEI Resources

Product Description:
Virus Classification: *Poxviridae*, *Orthopoxvirus*
Species: Ectromelia virus (ECTV)
Strain/Isolate: Moscow recombinant expressing mouse interleukin-4 (IL-4)
Original Source: This IL-4-expressing ECTV was prepared by recombining the murine IL-4 gene, under the control of the 11K late promoter of vaccinia virus, into the Chinese hamster ovary cell host-range gene of ECTV, Moscow.[1]
Comments: This IL-4-expressing ECTV produces a lethal infection in mouse strains that are genetically resistant to ECTV, Moscow.[1]

Material Provided:
Each vial contains approximately 1 mL of cell lysate and supernatant from BS-C-1 cells infected with ECTV.

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

Packaging/Storage:
NR-791 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: African green monkey kidney (BS-C-1) cells (ATCC® CCL-26™)
Growth Medium: Minimum Essential Medium supplemented with 2% irradiated fetal bovine serum, or equivalent
Infection: Cells should be 80–90% confluent (not 100% confluent)
Incubation: 3 to 5 days at 37°C and 5% CO_2
Cytopathic Effect: Cell rounding and detachment

Citation:
Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Ectromelia Virus Expressing Murine Interleukin-4, NR-791."

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/bmbl5/index.htm.

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References:
1. Buller, R. M. L., Personal Communication.
2. Jackson, R. J., et al. "Expression of Mouse Interleukin-4 by a Recombinant Ectromelia Virus Suppresses Cytolytic Lymphocyte Responses and Overcomes Genetic Resistance to Mousepox." J. Virol. 75 (2001): 1205–1210. PubMed: 11152493.
3. Stanford, M. M. and G. McFadden. "The 'Supervirus'? Lessons from IL-4-expressing Poxviruses." Trends Immunol. 26 (2005): 339–345. PubMed: 15922951.
4. Robbins, S. J., et al. "The Efficacy of Cidofovir Treatment of Mice Infected with Ectromelia (Mousepox) Virus Encoding Interleukin-4." Antiviral. Res. 66 (2005): 1–7. PubMed: 15781125.

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