

Genomic DNA from Cowpox Virus, Brighton Red

Catalog No. NR-2641

For research use only. Not for use in humans.

Contributor:
ATCC®

Manufacturer:
BEI Resources

Product Description:

Genomic DNA was extracted from a preparation of cell lysate and supernatant from African green monkey kidney cells (ATCC® CCL-26™) infected with cowpox virus, Brighton Red (BEI Resources NR-88). The Brighton strain was derived from a lesion on the finger of a cowman on a farm near Brighton, England in 1937.¹ It has been passaged multiple times in guinea pigs and rabbits.² The complete genomic sequence of cowpox virus, Brighton Red has been determined (GenBank: [AF482758.2](https://www.ncbi.nlm.nih.gov/nuccore/AF482758.2)).^{3,4,5,6}

NR-2641 has been qualified for PCR applications by amplification of an approximately 1000 nucleotide sequence. Recommended dilutions for successful PCR amplification are indicated on the Certificate of Analysis for each lot.

Material Provided:

Each vial contains approximately 100 µL of viral genomic RNA in TE buffer (10 mM Tris-HCl, 1 mM EDTA). The viral genomic DNA is in a background of cellular nucleic acid. The vial should be centrifuged prior to opening.

Packaging/Storage:

NR-2641 was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen on dry ice and should be stored at -60°C or colder immediately upon arrival. Freeze-thaw cycles should be minimized.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Genomic DNA from Cowpox Virus, Brighton Red, NR-2641."

Biosafety Level: 1

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](https://www.cdc.gov/biosafety/publications/bmbl5/index.htm). 6th ed. Washington, DC: U.S. Government Printing Office, 2020; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

Disclaimers:

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References:

1. Davies, J. H. T., L. R. Janes, and A. W. Downie. "Cowpox Infection in Farmworkers." [Lancet](https://pubmed.ncbi.nlm.nih.gov/15341538/) 235 (1938): 1534-1538.
2. Downie, A. W. "The Immunological Relationship of the Virus of Spontaneous Cowpox to Vaccinia Virus." [Brit. J. Exp. Path.](https://pubmed.ncbi.nlm.nih.gov/158176/) 20 (1939): 158-176.
3. Pickup, D. J., D. Bastia, H. O. Stone, and W. K. Joklik. "Sequence of Terminal Regions of Cowpox Virus DNA: Arrangement of Repeated and Unique Sequence Elements." [Proc. Natl. Acad. Sci. USA](https://pubmed.ncbi.nlm.nih.gov/71127116/) 79 (1982): 7112-7116. PubMed: 6961398.
4. Parsons, B. L. and D. J. Pickup. "Transcription of Orthopoxvirus Telomeres at Late Times During Infection." [Virology](https://pubmed.ncbi.nlm.nih.gov/2309453/) 175 (1990): 69-80. PubMed: 2309453.
5. Hu, F. Q. and D. J. Pickup. "Transcription of the Terminal Loop Region of Vaccinia Virus DNA is Initiated from the Telomere Sequences Directing DNA Resolution." [Virology](https://pubmed.ncbi.nlm.nih.gov/2014645/) 181 (1991): 716-720. PubMed: 2014645.
6. Hu, F. Q., C. A. Smith, and D. J. Pickup. "Cowpox Virus Contains Two Copies of an Early Gene Encoding a Soluble Secreted Form of the Type II TNF Receptor." [Virology](https://pubmed.ncbi.nlm.nih.gov/8091665/) 204 (1994): 343-356. PubMed: 8091665.

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