Plasmid pETMPOX/A27Lo Containing the A29L Gene from Monkeypox Virus, Zaire 79

Catalog No. NR-3022

This reagent is the tangible property of the U.S. Government.

For research use only. Not for human use.

Contributor:

Genoveffa Franchini, M.D., Animal Models and Retroviral Vaccines Section, NCI, NIH

Manufacturer:

BEI Resources

Product Description:

The monkeypox A29L gene (GenBank AY160186) was amplified from plasmid pMPOX/A27Lo by PCR and subcloned into the prokaryotic expression vector pET26b (Novagen®), which contains coding sequences for a 6-histidine tag at the C-terminus of the expressed protein.[1,2] The resulting bacterial expression plasmid, pETMPOX/A27Lo, was produced in *Escherichia coli* (*E. coli*) DH5α™ cells and extracted using a QIAGEN® EndoFree® Plasmid Maxi Kit. The pETMPOX/A27Lo plasmid is reported to direct the expression of soluble monkeypox A29L protein when transformed into an appropriate expression host cell such as *E. coli* BL21(DE3).[1] The designation A27Lo is used to indicate that the A29L gene is the monkeypox ortholog of the vaccinia virus A27L gene.

Material Provided:

Each vial contains approximately 20 to 60 ng of plasmid DNA in TE buffer (10 mM Tris-HCl, 1 mM EDTA, pH 7.0). The lot-specific DNA concentration and content are shown on the Certificate of Analysis.

Packaging/Storage:

NR-3022 was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen on dry ice and should be stored at -20°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: Plasmid pETMPOX/A27Lo Containing the A29L Gene from Monkeypox Virus, Zaire 79, NR-3022."

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. 5th ed. Washington, DC: U.S. Government Printing Office, 2007; see www.cdc.gov/od/ohs/biosfty/bmbl5/bmbl5toc.htm.

Disclaimers:

You are authorized to use this product for research use only. It is not intended for human use.

Use of this product is subject to the terms and conditions of the BEI Resources Material Transfer Agreement (MTA). The MTA is available on our Web site at www.beiresources.org.

While BEI Resources uses reasonable efforts to include accurate and up-to-date information on this product sheet, neither ATCC® nor the U.S. Government makes any warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. Neither ATCC® nor the U.S. Government warrants that such information has been confirmed to be accurate.

This product is sent with the condition that you are responsible for its safe storage, handling, use and disposal. ATCC® and the U.S. Government are not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to ensure authenticity and reliability of materials on deposit, the U.S. Government, ATCC®, their suppliers and contributors to BEI Resources are not liable for damages arising from the misidentification or misrepresentation of products.

Use Restrictions:

This material is distributed for internal research, non-commercial purposes only. This material, its product or its derivatives may not be distributed to third parties. Except as performed under a U.S. Government contract, individuals contemplating commercial use of the material, its products or its derivatives must contact the contributor to determine if a license is required. U.S. Government contractors may need a license before first commercial sale. Use of this material may be subject to third party patent rights (U.S. Patent Number 6,562,376).

References:

1. Heraud, J. M., et al. "Subunit Recombinant Vaccine Protects Against Monkeypox." J. Immunol. 177 (2006): 2552-2564. PubMed: 16888017.
2. Reference 1 contains a typographical error in the sequence of the forward primer used to amplify and subclone the monkeypox A29L gene (an extra adenine residue at position 20); nucleotide sequence analysis at BEI Resources indicates that the A29L insert in NR-3022 is actually identical to AY160186 in that region.

Support Provided by NIAID

BEI Resources
www.beiresources.org

E-mail: contact@beiresources.org
Tel: 800-359-7370
Fax: 703-365-2898