



# lambdaNK1316

77345™

## Description

**Organism:** *Escherichia coli* (Migula) Castellani and Chalmers

**Clone type:** Clone

**Shipping information:** bacteria-free lysate

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## Storage Conditions

**Product format:** Freeze-dried

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## Intended Use

This product is intended for laboratory research use only. It is not intended for any animal or human therapeutic use, any human or animal consumption, or any diagnostic use.

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## BSL 1

ATCC determines the biosafety level of a material based on our risk assessment as guided by the current edition of *Biosafety in Microbiological and Biomedical Laboratories (BMBL)*, U.S. Department of Health and Human Services. It is your responsibility to understand the hazards associated with the material per your organization's policies and procedures as well as any other applicable regulations as enforced by your local or national agencies.

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## Certificate of Analysis

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For batch-specific test results, refer to the applicable certificate of analysis that can be found at [www.atcc.org](http://www.atcc.org).

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## Insert Information

**Insert size (kb):** 4.4000000000000004

**Type of DNA:** genomic

**Genome:** Escherichia coli

**Target gene:** transposase; Tn10; ats1 ats2 (ATS)

**Gene name:** transposase, Tn10, ats1 ats2 (ATS)

**Gene product:** transposase, Tn10, ats1 ats2 (ATS)

**Contains complete coding sequence:** Unknown

**Insert end:** EcoRI

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## Vector Information

**Construct size (kb):** 0.0

**Vector name:** lambdahop

**Type of vector:** phage

**Host range:** *Escherichia coli*

**Vector end:** EcoRI

**Cloning sites:** EcoRI

**Replicon:** lambda

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## Notes

Restriction digests of the clone give the following sizes (kb): EcoRI--20.0, 9.8, 4.8, 3.6, 3.15, 3.15; HindIII-->23.0, 6.2, 4.5, 3.9, 3.25, 1.1, 0.8; BamHI--17.0, 12.0, 6.8, 5.9, 1.8; BglII--33.5, 6.8, 2.4, 0.7; XbaI--26.0, 18.0.  
- ATCC staff

Construct useful for general transposon mutagenesis in *Escherichia coli*.  
- Methods Enzymol. 204: 139-180, 1991

Contains the *ats1 ats2* transposase gene that permits relaxed insertion specificity (altered target specificity, ATS). Expression is regulated by the *P<sub>tac</sub>* promoter, inducible by IPTG.

- Methods Enzymol. 204: 139-180, 1991

The transposase segment extends from IS10R to the *EcoRI* site at nt 3140 of Tn10, with a deletion of nucleotides 1329-1942 to remove the transposase binding site.

- Methods Enzymol. 204: 139-180, 1991

Contains a 1.8 kb mini-Tn10 cassette conferring kanamycin resistance, bounded by inverted repeats of the outermost 70 bp of IS10R and embedded in 40 bp of *lambda*cl terminating in *HindIII* sites.

- Methods Enzymol. 204: 139-180, 1991

The vector has mutations in replication genes, the repressor, and the integration system. Genotype: b522 cI857 *Pam80 nin5*. The *EcoRI* cloning site is between bp 21226 and 26104.

- Methods Enzymol. 204: 139-180, 1991

The order of the major features in this bacteriophage is: A-J - *EcoRI* - mini-Tn10 *kan* - ATS transposase - *P<sub>tac</sub>* - *EcoRI* - b522 - cI857 - P80 - *nin5*.

- Methods Enzymol. 204: 139-180, 1991

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## Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: lambdaNK1316 (ATCC 77345)

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## References

References and other information relating to this material are available at [www.atcc.org](http://www.atcc.org).

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## Revision

This information on this document was last updated on 2025-09-09

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## Contact Information

ATCC

10801 University Boulevard

Manassas, VA 20110-2209

USA

## **lambdaNK1316**

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US telephone: 800-638-6597

Worldwide telephone: +1-703-365-2700

Email: [tech@atcc.org](mailto:tech@atcc.org) or contact your local distributor

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