

Certificate of Analysis

Lambda DNA:

Part No.	Size
D150A	250µg

Description: Lambda DNA *ci857 Sam7* is isolated from infected *E. coli* strain W3350 and is 48,502bp in size. Restriction enzyme-digested lambda DNA generates molecular weight size markers used in gel analysis of nucleic acids. Lambda DNA is also a commonly used substrate in restriction enzyme activity assays. The nucleotide sequence has been determined (1). For restriction map information of Lambda DNA, please see Tables 1A and 1B in Product Information section below (2).

Actual Concentration: ≥300µg/ml. (See the vial label for lot-specific concentration.)

Optical Densities: $A_{260}/A_{250} \geq 1.05$; $A_{260}/A_{280} \geq 1.80$.

Storage Buffer: Lambda DNA is provided in 10mM Tris-HCl (pH 7.5 @ 25°C), 10mM NaCl and 1mM EDTA.

Storage Conditions: Store at -20°C. Avoid multiple freeze-thaw cycles and exposure to frequent temperature changes. See the expiration date on the product label.

Usage Note: Concentration gradients may form in frozen products and should be dispersed upon thawing. Mix well prior to use.

Quality Control Assays

Contaminant Activity

Nuclease Assay: To test for nuclease contamination, 1µg of Lambda DNA is incubated in standard restriction digest buffers for 16 hours at 37°C. Following incubation, 0.5µg of Lambda DNA is visualized on an ethidium bromide-stained agarose gel to verify the absence of visible degradation.

Digestion Assay: Lambda DNA is tested as a suitable substrate for site-specific digestion by restriction enzymes CspI and DpnI. One microgram of Lambda DNA is digested with CspI and DpnI. Following digestion, 0.5µg of Lambda DNA is visualized on an ethidium bromide-stained agarose gel to verify the correct banding pattern for CspI: 26,259, 7,942, 5,305, 3,801, 2,954 and 2,241bp size fragments. DpnI does not cut unmethylated lambda DNA but cuts Lambda DNA in excess of 50 times, ensuring that it is indeed methylated.

Product Information

Table 1A. Enzymes with a Single Recognition Site in Lambda DNA.

Apal	NaeI	NarI	NgoMI	NheI	SnaBI
SpII	XbaI	XhoI			

Table 1B. Enzymes with No Recognition Sites in Lambda DNA.

NotI	SfiI	Sgfl	SpeI
------	------	------	------

References

1. Sanger, F. *et al.* (1982) Nucleotide sequence of bacteriophage lambda DNA. *J. Mol. Biol.* **162**, 729-73.
2. Brown, T.A. (1991) In: *Molecular Biology: Labfax*, Hames, B.D. and Rickwood, D., series eds., Academic Press and BIOS Scientific Publishers Limited, CA, 265.

Signed by:

R. Wheeler, Quality Assurance

Lambda DNA

REF D1501

LOT 0000244947

-30°C

-10°C

2022-03-30

Conc: 575µg/ml
250µg

Dispensed Lot#: 0000203731

For Laboratory Use

Country of Origin: USA

Promega Corporation
2800 Woods Hollow Road
Madison, WI 53711-5399 USA



ADD1501 00002449471

PEEL
HERE



Promega

Promega Corporation

2800 Woods Hollow Road	
Madison, WI 53711-5399 USA	
Telephone	608-274-4330
Toll Free	800-356-9526
Fax	608-277-2516
Internet	www.promega.com

PRODUCT USE LIMITATIONS, WARRANTY, DISCLAIMER

Promega manufactures products for a number of intended uses. Please refer to the product label for the intended use statements for specific products. Promega products contain chemicals which may be harmful if misused. Due care should be exercised with all Promega products to prevent direct human contact.

Each Promega product is shipped with documentation stating specifications and other technical information. Promega products are warranted to meet or exceed the stated specifications. Promega's sole obligation and the customer's sole remedy is limited to replacement of products free of charge in the event products fail to perform as warranted. Promega makes no other warranty of any kind whatsoever, and SPECIFICALLY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES OF ANY KIND OR NATURE WHATSOEVER, DIRECTLY OR INDIRECTLY, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, AS TO THE SUITABILITY, PRODUCTIVITY, DURABILITY, FITNESS FOR A PARTICULAR PURPOSE OR USE, MERCHANTABILITY, CONDITION, OR ANY OTHER MATTER WITH RESPECT TO PROMEGA PRODUCTS. In no event shall Promega be liable for claims for any other damages, whether direct, incidental, foreseeable, consequential, or special (including but not limited to loss of use, revenue or profit), whether based upon warranty, contract, tort (including negligence) or strict liability arising in connection with the sale or the failure of Promega products to perform in accordance with the stated specifications.

© 1997-2013, 2016 Promega Corporation. All Rights Reserved.

All specifications are subject to change without prior notice.

Product claims are subject to change. Please contact Promega Technical Services or access the Promega online catalog for the most up-to-date information on Promega products.

Part# 9PID:150

Printed in USA. Revised 10/16.