

Anti-LexA antibody, rabbit serum

Immunized Animal: Rabbit

Polyclonal antiserum

61-001 50 μ l, 61-002 250 μ l

E. coli LexA protein binds specifically to the SOS-box sequence) and represses the genes belonging to the SOS regulon. In response to DNA damage, RecA protein is activated by ss-DNA accumulated in the damaged cells and promotes autocleavage of LexA repressor by its coprotease activity. As the results, DNA repair genes and error prone polymerases are induced, and DNA damage is repaired and mutation is induced (1).

The *lexA* gene is used for yeast two-hybrid experiments as a bait to identify the protein-protein interaction in vivo (2).

This product was prepared by immunizing rabbit with full-size highly-purified recombinant LexA protein. Using this antibody, 23 kD LexA protein was identified in the *E. coli* whole-cell lysate (Fig 1) and the expression of bait constructs was identified in yeast extracts by western blotting.

Usage

- 1) Studies on the SOS regulation in *E. coli* (3). For western blotting; 1000~3000 fold dilution.
- 2) Construction and expression of a bait protein fused to LexA protein can be examined by western blotting of the yeast extracts, using the antiserum.

Purified LexA protein is available from BioAcademia (#01-002) to be used as a positive control for western blotting.

- 3) Immunohistochemistry (One of our customer detected a LexA fusion protein expressed in transgenic *Drosophila* after fixation with 4% formaldehyde).
- 4) Immunoprecipitation

Specification

Form: antiserum added with 0.05% sodium azide

Storage: 4 C (longer period, -70 C)

Reference: This antibody has been used in Ref 3.

1. Friedberg EC, et al. DNA Repair and Mutagenesis 2nd Ed., ASM Press (2005)
2. Sambrook J & Russell DW, Molecular Cloning 3rd Ed. Cold Spring Harbor Press (2001)
3. Hishida T, et al., Genes Dev. 18, 1886-1897 (2004)

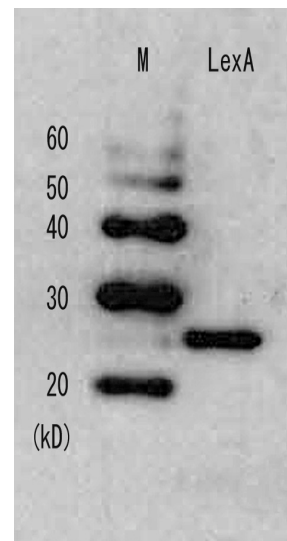


Fig.1 Detection of LexA repressor in the whole cell lysate of *E. coli* by this antiserum

<Distributed by >: SCETI K.K. DF Kasumigaseki Place, 3-6-7 Kasumigaseki,
Chiyoda-ku Tokyo 100-0013 JAPAN
Tel: +81-3-5510-2347 Fax: +81-3-5510-0134
E-mail: exp-pet@sceti.co.jp URL: www.sceti.co.jp/export/

<Manufactured by > : BioAcademia, Inc. 7-7-18 Saito-Asagi, Ibaraki, Osaka 567-0085, JAPAN