



Anti-LexA

BACKGROUND

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.

Product type	Primary antibodies
Host	Rabbit
Source	Serum
Form	Liquid Antiserum added with 0.05% sodium azide
Volume	250 µl
Concentration	
Specificity	LexA protein
Antigen	Recombinant LexA protein, <i>E. coli</i>
Isotype	

Application notes WB, IHC, IP

Recommended use

1) 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).

Recommended dilutions

Western blotting: 1/1,000 to 1/3,000

Optimal dilutions/concentrations should be determined by the end user.

Staining Pattern

Cross reactivity *E. coli*

Storage 4°C (long period; -70°C)

References 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)

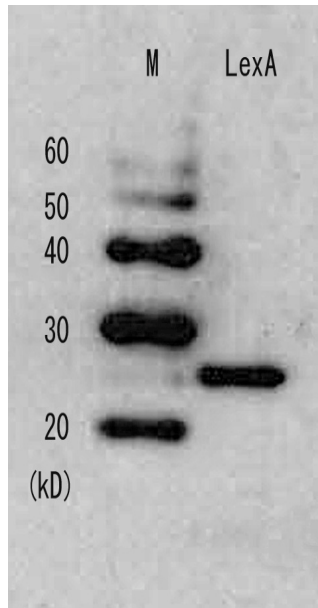


Fig.1 Detection of LexA repressor in the whole cell lysate of E. coli by this antiserum

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