Anti-LexA antibody, rabbit serum, ChIp grade

Product code	61-001 61-002
Size	50 µl 250µl
Storage	Store at 4℃ for short term. For long term storage store at -20℃. Aliquot to avoid repeated freezing thawing.
Concentration	N/A
Buffer	Rabbit antiserum added with 0.05% sodium azide
Purity	N/A
Immunogen	Recombinant LexA protein
Isotype	N/A
Reactivity	*E.coli.*
Validation	N/A
Application	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 (LexA fusion protein was detected in transgenic Drosophila after fixation with 4% formalodehyde.) 4. Immunoprecipitation and chromatin immuno-precipitation
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 a result, 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.
Data Link	UniProtKB P0A7C2 (LEXA_ECOLI)

Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR MILITARY USE.

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Data Images: 61-001 Anti-LexA antibody, rabbit serum

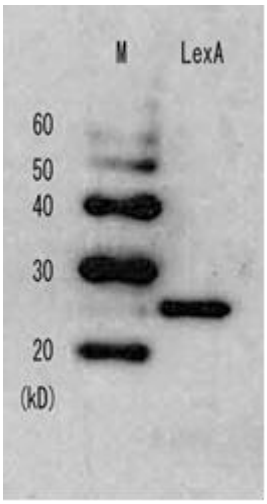

Fig.1 Detection of LexA repressor in the *E. coli* whole cell lysate by this antiserum

References: This antibody has been used in Ref 3.

1. Friedberg EC *et al DNA Repair and Mutagenesis* 2nd Ed., ASM Presss (2005)
2. Sambrook J & Russell DW *Molecular Cloning* 3rd Ed. Cold Spring Harbor Press (2001)
3. Hishida T *et al* "Role of the Escherichia coli RecQ DNAhelicase in SOS signaling and genome stabilization at stalled replication forks" *Genes Dev* **18**: 1886-1897 (2004) PMID: 15289460

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