Anti-*E.coli* LexA repressor antibody, rabbit polyclonal

Product code	61-021
Size	100 μg
Storage	-20℃
Concentration	1.0 mg/ml
Buffer	PBS- with 50% glycerol
Purity	Purified IgG fraction with protein A from rabbit antiserum
Immunogen	Purified Recombinant LexA repressor protein
Isotype	Rabbit IgG
Reactivity	*E.coli.*
Special notes	N/A
Application	1. Western blotting (1μg/ml) **Purified LexA repressor protein is available from BioAcademia (#01-005, -006) to be used as a positive control for Western blotting.** 2. Construction and expression of a bait protein fused to LexA repressor protein can be examined by Western blotting of the yeast extracts,using the #61-001. 3. Immunohistochemistry (LexA repressor fusion protein was detected in transgenic Drosophila after fixation with 4% formalodehyde.) 4. Immunoprecipitation and chromatin immuno-precipitation
Background	*E. coli* LexA repressor 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 repressor protein. Using this antibody, 23 kD LexA repressor 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: 61-021 Anti-*E.coli* LexA repressor antibody, rabbit polyclonal

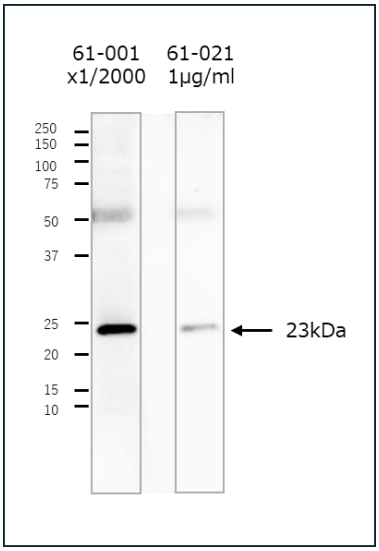

Fig.1 Detection of LexA repressor in the *E. coli* whole cell lysate by #64-001 and #64-021

Applied sample; 10μg of *E.coli* (AB1157) whole cell lysate

Primary antibody; 2000 dilutions of anti-*E.coli* LexA antibody (#61-001)

1μg/ml of anti-*E.coli* LexA antibody (#61-021)

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

Related product:

61-001	Anti-*E.coli* LexA repressor antibody, rabbit serum
01-005, -006	*E.coli* LexA repressor

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