

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

Product code	61-021
Size	100 μ g
Storage	-20°C
Concentration	1.0 mg/ml
Buffer	PBS- with 50% glycerol
Purity	Purified IgG fraction with protein A from rabbit antiserum
Immunogen	Purified Recombinant LexA protein
Isotype	Rabbit IgG
Reactivity	<i>E.coli</i> .
Special notes	N/A
Application	<p>1. Western blotting (1μg/ml) Purified LexA protein is available from BioAcademia (#01-005, -006) to be used as a positive control for Western blotting.</p> <p>2. Construction and expression of a bait protein fused to LexA protein can be examined by Western blotting of the yeast extracts, using the #61-001.</p> <p>3. Immunohistochemistry (LexA fusion protein was detected in transgenic <i>Drosophila</i> after fixation with 4% formaldehyde.)</p> <p>4. Immunoprecipitation and chromatin immuno-precipitation</p>
Background	<p><i>E. coli</i> 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).</p> <p>The <i>lexA</i> gene is used for yeast two-hybrid experiments as a bait to identify the protein-protein interaction in vivo (2).</p> <p>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 <i>E. coli</i> whole-cell lysate (Fig 1) and the expression of bait constructs was identified in yeast extracts by Western blotting.</p>
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.	

Data Images: 61-021 Anti-*E.coli* LexA antibody, rabbit polyclonal

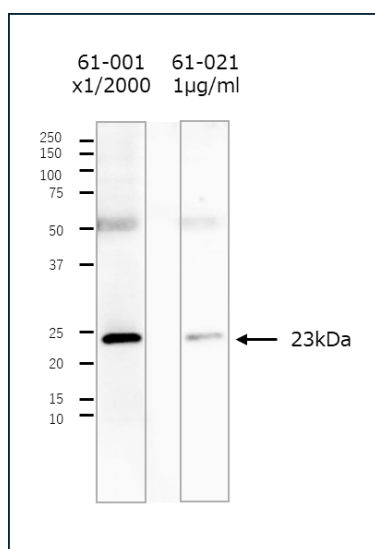


Fig.1 Detection of LexA repressor in the *E. coli* whole cell lysate by #64-001 and #64-021

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 Press (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](https://pubmed.ncbi.nlm.nih.gov/15289460/)

Related product:

61-001 Anti-*E.coli* LexA antibody, rabbit serum

01-005, -006 *E.coli* LexA repressor