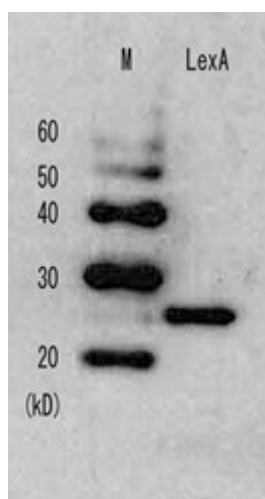


## Anti-*E.coli* LexA antibody, rabbit serum

<b>Product code</b>	61-001                  61-002
<b>Size</b>	50 µl                      250 µl
<b>Storage</b>	Store at 4°C for short term. For long term storage store at -20°C. Aliquot to avoid repeated freezing thawing.
<b>Concentration</b>	N/A
<b>Buffer</b>	0.05% sodium azide
<b>Purity</b>	Rabbit antiserum
<b>Immunogen</b>	Purified Recombinant LexA protein
<b>Isotype</b>	Rabbit IgG
<b>Reactivity</b>	<i>E.coli</i> .
<b>Special notes</b>	N/A
<b>Application</b>	<ol style="list-style-type: none"> <li>1. Studies on the SOS regulation in <i>E. coli</i> (3). For Western blotting; 1000~3000 fold dilution.</li> <li>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. <b>Purified LexA protein is available from BioAcademia (#01-005, -006) to be used as a positive control for Western blotting.</b></li> <li>3. Immunohistochemistry (LexA fusion protein was detected in transgenic <i>Drosophila</i> after fixation with 4% formaldehyde.)</li> <li>4. Immunoprecipitation and chromatin immuno-precipitation</li> </ol>
<b>Background</b>	<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>
<b>Data Link</b>	UniProtKB <a href="#">P0A7C2</a> (LEXA_ECOLI)
Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR MILITARY USE.	

**Data Images:** 61-001 Anti-*E.coli* 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* 2<sup>nd</sup> Ed., ASM Press (2005)
2. Sambrook J & Russell DW *Molecular Cloning* 3<sup>rd</sup> Ed. Cold Spring Harbor Press (2001)
3. Hishida T *et al* "Role of the Escherichia coli RecQ DNA helicase 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:**

- 61-021            Anti-*E.coli* LexA antibody, rabbit polyclonal  
 01-005, -006    *E.coli* LexA repressor