

Product datasheet for **AP09404PU-N**

lacI Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, WB
Recommended Dilution:	ELISA: 1/90,000–1/100,000. Western Blot: 1/500-1/2,000. Expect a band approximately ~38 kDa in size corresponding to Lac I by Western blotting in the appropriate cell lysate or extract.
Reactivity:	Escherichia coli
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Full-length recombinant Lac I protein
Specificity:	This antibody reacts with recombinant Lac I protein. A BLAST analysis was used to suggest cross-reactivity with Lac I from DNA-binding transcriptional repressor in Escherichia coli (strain DH10B) and transcriptional repressor of the lac operon in Shigella sonnei (strain Ss046) based on a 100% homology with the immunizing sequence.
Formulation:	0.02M Potassium Phosphate, 0.15M Sodium Chloride, pH 7.2 containing 0.01% (w/v) Sodium Azide as preservative State: Aff - Purified State: Liquid (sterile filtered) purified Ig
Concentration:	lot specific
Purification:	Affinity Chromatography
Conjugation:	Unconjugated



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Storage: Store the antibody at -20°C.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

Storage Conditions for Trial Size:

This vial contains a relatively low volume of reagent (25 µl). To minimize loss of volume dilute 1:10 by adding 225 µl of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below.

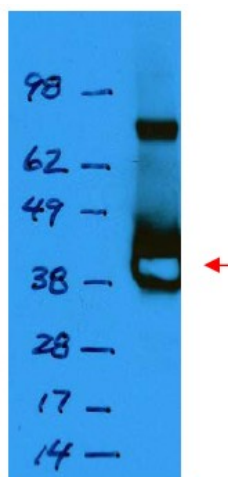
Stability: Shelf life: 3 month from despatch.

Database Link: [P03023](#)

Background: The lac repressor protein (Lac I) is an important genetic control protein. It controls the expression of the lactose metabolizing enzymes in Escherichia coli. This regulation involves specific recognition of the operator DNA sequence (Lac O) and consequent inhibition of transcription initiation by RNA polymerase; modulation of binding at this target site by small sugar molecules, inducers, provides the basis for regulation. Different ligand binding activities are associated with the isolated domains of Lac I: specific and nonspecific DNA binding with the NH2 termini, and inducer and specific DNA binding with the core protein. This antibody could possibly be used to recover and purify protein/nucleic acid complexes (host and viral proteins associated with the viral DNA) from infected cells.

Synonyms: Lactose operon repressor, b0345, JW0336

Product images:



Western blot using Affinity purified anti-Lac I antibody shows detection of a 38 kDa band corresponding to recombinant Lac I (arrowhead). The blot was blocked with 5% BLOTTO in TTBS overnight at 4°C. Primary antibody was used at a 1/1,000 dilution followed by reaction with a 1/10,000 dilution of HRP Goat anti-Rabbit IgG. ECL was used for detection.