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Anti-Lac I (RABBIT) Antibody

Lac I Antibody
Catalog # ASR5447

Specification

Anti-Lac I (RABBIT) Antibody - Product Information

Host	**Rabbit**
Conjugate	**Unconjugated**
Target Species	**Escherichia coli**
Reactivity	**E. coli**
Clonality	**Polyclonal**
Application	**WB, E, I, LCI**
Application Note	**Rabbit anti-Lac-I antibody has been tested for use in ELISA and western blotting using recombinant Lac I protein. Specific conditions for reactivity and detection of Lac I should be optimized by the end user. Expect a band approximately ~38 kDa in size corresponding to Lac I by western blotting in the appropriate cell lysate or extract.**
Physical State	**Liquid (sterile filtered)**
Buffer	**0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2**
Immunogen	**This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a full-length recombinant Lac I protein.**
Preservative	**0.01% (w/v) Sodium Azide**

Anti-Lac I (RABBIT) Antibody - Additional Information

Gene ID 945007

Other Names
8156885

Purity
This Anti-Lac I product was affinity purified from monospecific antiserum by immunoaffinity chromatography. 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. Cross-reactivity with Lac I from other sources has not been determined.

Storage Condition
Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note
This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-Lac I (RABBIT) Antibody - Protein Information

Name lacI

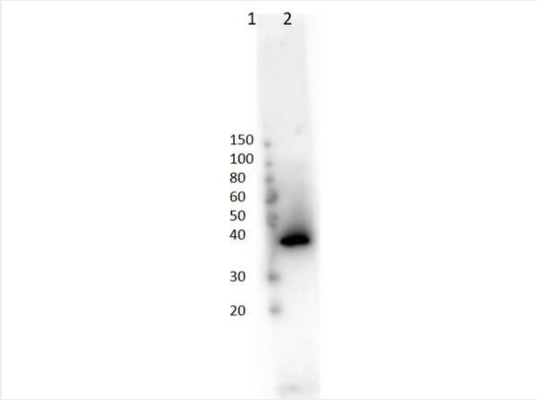
Function
Repressor of the lactose operon. Binds allolactose as an inducer.

Anti-Lac I (RABBIT) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Lac I (RABBIT) Antibody - Images



Western Blot of Rabbit Anti-Lac I Antibody. Lane 1: Molecular Weight Marker (3 µL). Lane 2: recombinant LAC-I (0.05 µg). Primary Antibody: Anti-LAC-I at 1:1000 for 1hr at RT. Secondary Antibody: Goat anti-Rabbit IgG HRP (p/n 611-103-122) at 1:40,000 for 30mins at RT. Block: BlockOut Buffer (p/n MB-073) for 30mins at RT. Predicted/Observed MW: ~38kDa.

Anti-Lac I (RABBIT) Antibody - Background

Anti-Lac I antibody is designed, produced, and validated as part of a collaboration between Rockland and the National Cancer Institute (NCI) and is suitable for Cancer, Immunology and Nuclear Signaling research. 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.