

## Anti-LYSOZYME (RABBIT) Antibody

Lysozyme Antibody Catalog # ASR4352

### Specification

## Anti-LYSOZYME (RABBIT) Antibody - Product Information

| Host<br>Conjugate<br>Target Species<br>Reactivity<br>Clonality<br>Application<br>Application Note | Rabbit<br>Unconjugated<br>Chicken<br>Chicken<br>Polyclonal<br>WB, IHC, E, IP, I, LCI<br>Anti-Lysozyme Hen Egg White purified<br>antibody has been tested for use in ELISA<br>and western blot. Specific conditions for<br>reactivity should be optimized by the end<br>user. Expect a band at ~14 kDa in size<br>corresponding to lysozyme by western<br>blotting in the appropriate cell lysate or<br>extract. |
|---|---|
| Physical State<br>Buffer  | Liquid (sterile filtered)<br>0.02 M Potassium Phosphate, 0.15 M<br>Sodium Chloride, pH 7.2  |
| Immunogen   | This purified antibody was prepared from<br>whole rabbit serum produced by repeated<br>immunizations with full length protein<br>corresponding to amino acids 1-129 of Hen<br>Egg White Lysozyme.   |
| Preservative  | 0.01% (w/v) Sodium Azide  |

# Anti-LYSOZYME (RABBIT) Antibody - Additional Information

Gene ID 396218

# Other Names 396218

#### Purity

This purified antibody is directed against lysozyme from hen egg white protein. This product is an IgG fraction antibody purified from monospecific antiserum by a multi-step process, which includes delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis against the buffer stated above. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Rabbit Serum as well as purified and partially purified Lysozyme (Hen Egg White). A BLAST analysis was used to suggest that this antibody would react with all forms of lysozyme from chicken, including precursor as well as A and B chains. Chains designated as M, L, F, C, Y and D also show 100% sequence homology. Lysozyme from quail and pheasant are also reported to be 100% identical with HEW lysozyme. Cross reactivity against lysozyme from other sources may occur but has not been specifically 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-LYSOZYME (RABBIT) Antibody - Protein Information

Name LYZ

Function

Lysozymes have primarily a bacteriolytic function; those in tissues and body fluids are associated with the monocyte-macrophage system and enhance the activity of immunoagents. Has bacteriolytic activity against M.luteus.

Cellular Location Secreted.

**Tissue Location** In the egg white and polymorphonuclear leukocytes.

### Anti-LYSOZYME (RABBIT) Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-LYSOZYME (RABBIT) Antibody - Images

| kDa   | M 1 |
|-------|-----|
| 150 - |     |
| 100 - |     |
| 80 -  |     |
| 60 -  |     |
| 50 -  |     |
| 40 -  |     |
| 30 -  |     |
| 20 -  |     |
|       |     |

Western Blot of Rabbit anti-Lysozyme (Hen Egg White) Antibody. Lane 1: Lysozyme (Hen Egg



White). Load: 50 ng per lane. Primary antibody: Rabbit anti-Lysozyme (Hen Egg White) Antibody at 1:1,000 overnight at 4°C. Secondary antibody: HRP rabbit secondary antibody at 1:40,000 for 30 min at RT. Block: MB-070 for 30 min at RT. Predicted/Observed size: ~14-16 kDa for Lysozyme (Hen Egg White).

# Anti-LYSOZYME (RABBIT) Antibody - Background

Lysozyme is a relatively small (129 AA) secretory enzyme that catalyzes the hydrolysis of  $\beta$ -1,4 glucosidic linkages between N-acetylmuramic acid (NAM) and N-acetylglucosamine (NAG) comprising the cell walls of bacteria and to a lesser degree chitin oligomers. Lysozyme is common in animals and plants. In birds, lysozyme is also an exceptionally abundant protein in egg whites. Its biological function in fowl eggs is unclear. Hen egg white lysozyme "c" is the most commonly studied form and source of the enzyme. Lysozyme from domestic goose is designated lysozyme "g". Lysozyme is also found in vertebrates, including human, mostly in secretions and certain tissues, such as saliva, tears, milk, cervical mucus, leucocytes, kidneys and urine, where it probably serves as an anti-bacterial agent by digesting and weakening the rigid bacterial cell wall, thereby rendering the bacteria susceptible to osmotic lysis. Plant lysozyme is found in ficus and papaya latex, and is chemically distinct from the egg white enzyme.