Datasheet for ABIN964704

anti-LYZ antibody (AA 1-129)

2 Images

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Overview

Quantity:	100 µg
Target:	LYZ
Binding Specificity:	AA 1-129
Reactivity:	Chicken
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This LYZ antibody is un-conjugated
Application:	Western Blotting (WB), ELISA

Product Details

Immunogen:	This purified antibody was prepared from whole rabbit serum produced by repeated immunizations with full length protein corresponding to amino acids 1-129 of Hen Egg White Lysozyme. Immunogen Type: NativeProtein
Isotype:	IgG
Specificity:	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.

Product Details

	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.
Characteristics:	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.
Sterility:	Sterile filtered

Target Details

Target:	LYZ
Alternative Name:	Lysozyme (LYZ Products)
Background:	Lysozyme is a relatively small (129 AA) secretory enzyme that catalyzes the hydrolysis of β-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. Synonyms: 1 4 beta n acetylmuramidase c antibody, EC 3.2.1.17 antibody, lysosyme antibody, Lysozyme C antibody, Lysozyme C precursor antibody, Lyz antibody, LZM antibody

Target Details

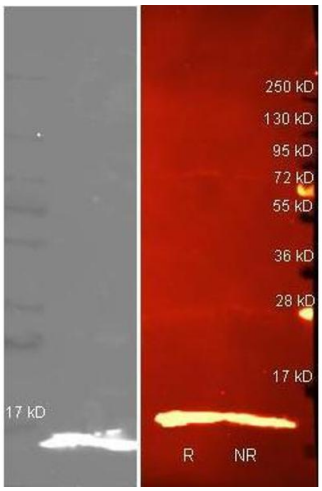
Gene ID:	395708, 47825389
UniProt:	Q6LEL2

Application Details

Application Notes:	This purified antibody has been tested for use in ELISA and western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band at ~14 kDa in size corresponding to lysozyme by western blotting in the appropriate cell lysate or extract.
Comment:	Gene Name: LYZ
Restrictions:	For Research Use only

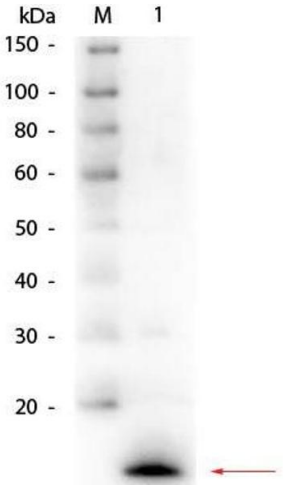
Handling

Format:	Liquid
Concentration:	1.0 mg/ml
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	Sodium azide
Precaution of Use:	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C/-20 °C
Storage Comment:	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. 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. Expiration date is one (1) year from date of opening.
Expiry Date:	12 months



Western Blotting

Image 1. Western Blot of Rabbit anti-Lysozyme antibody. (Left Blot-grey) Lane 1: purified Lysozyme reduced. Lane 2: purified Lysozyme non-reduced. Load: 0.5 ug per lane. Primary antibody: Biotin Conjugated Rabbit anti Lysozyme antibody at 1:5000 for overnight at 4°C. Secondary antibody: Dylight 488 conjugated Streptavidin at 1:5,000 with Atto 425 conjugated goat anti rabbit secondary antibody at 1:10,000 for 1.5 hrs at RT. (Right Blot-red) Lane 1: purified Lysozyme reduced. Lane 2: purified Lysozyme non-reduced. Secondary antibody: Dylight 488 conjugated Streptavidin at 1:5,000 with Dylight 549 conjugated secondary antibody at 1:10,000 for 1.5 hrs at RT. Block: ABIN925618 overnight at 4°C. Predicted/Observed size: 4.9kDa, 5kDa for Lysozyme. Other band(s): none.



Western Blotting

Image 2. 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: ABIN925618 for 30 min at RT. Predicted/Observed size: 4.9 kDa, 4.9 kDa for Lysozyme (Hen Egg White).