

CERTIFICATE OF ANALYSIS - TECHNICAL DATA SHEET

Product name Lysozyme, Human, pAb

Catalog number HP9035-20UG

Lot number - Expiry date -

Volume 200 μl Amount 20 μg

Formulation 0.2 μm filtered in PBS+0.1%BSA+0.02%NaN3 Concentration 100 μg/ml

Host Species Rabbit IgG Conjugate None

Endotoxin N.A. Purification Protein A

Storage 4°C

Application notes

| | IHC-F | IHC-P | IF | FC | FS | IA | IP | W |
|-------------|-------|-------|----|----|----|----|----|---|
| Reference # | | | | | | | | |
| Yes | | | | | | • | • | • |
| No | | | | | | | | |
| N.D. | • | • | • | • | • | | | |

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:10.

IA: the antibody can be used as coating and detection.

General Information

Description

Lysozyme is a 14 kd enzyme directed against the b 1 a 4 glycosidic bond between N-acetylglucosamine and N-acetylmuramic acid residues that make up peptidoglycan. Lysozyme is an antimicrobial protein secreted by polymorphonuclear leukocytes and is widely distributed in secretions such as airway secretions and nasal fluid whereas it is the most effective antimicrobial protein. It is also produced by monocytes, macrophages and epithelial cells. Lysozyme is able to kill bacteria by enzymatic lysis of bacterial cell walls and by a nonenzymatic mechanism. Allthough lysozyme is highly active against many gram-positive bacteria it is ineffective against gram-negative bacteria unless potentiated by certain cofactors (lactoferrin, antibody-complement or hydrogen peroxide-ascorbic acid). Next to its antimicrobial activity lysozyme has many other physiological functions including inactivation of certain viruses, important roles in surveillance of membranes of mammalian cells, immune regulatory activity, anti-inflammatory and antitumor activity.

References

- Laible, N et al; Bactericidal activity of human lysozyme, muramidase inactivating lysozyme, and cationic polypeptides against Streptococcus sanguis and Streptococcus faecalis: inhibition by chitin oligosaccharides. Infect Immun 1985, 48: 720
- 2. Cole, A et al; Innate antimicrobial activity of nasal secretions. Infect Immun 1999, 67: 3267
- 3. Ibrahim, H et al; Strategies for new antimicrobial proteins and peptides: lysozyme and aprotinin as model molecules. Curr Pharm Des 2002, 8: 671
- Cole, A et al; Cationic polypeptides are required for antibacterial activity of human airway fluid. J Immunol 2002, 169: 6985

Storage&stability

Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.

Precautions

For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.

Version: 09-2020

We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC Brenda Teunissen

Date 31/03/2021

Do you have any questions or comments regarding this product? Please contact us via support@hycultbiotech.com.