

**CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET**

<b>Product name</b>	Lysozyme, Human, pAb	<b>Expiry date</b>	-
<b>Catalog number</b>	HP9035		
<b>Lot number</b>	-	<b>Amount</b>	100 µg
<b>Volume</b>	1 ml	<b>Concentration</b>	100 µg/ml
<b>Formulation</b>	0.2 µm filtered in PBS+0.1%BSA+0.02%NaN3	<b>Conjugate</b>	None
<b>Host Species</b>	Rabbit IgG	<b>Purification</b>	Protein A
<b>Endotoxin</b>	N.A.		
<b>Storage</b>	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. Although 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
  - Cole, A et al; Innate antimicrobial activity of nasal secretions. Infect Immun 1999, 67: 3267
  - 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.

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  
Robbert Zwinkels

Date  
06/04/2018

Do you have any questions or comments regarding this product? Please contact us via [support@hycultbiotech.com](mailto:support@hycultbiotech.com).