

PRODUCT INFORMATION



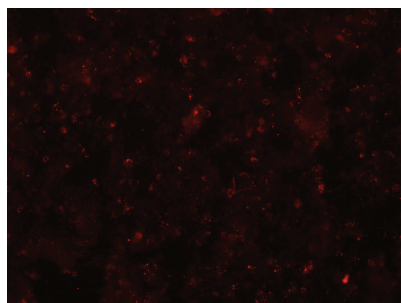
Lysozyme C Monoclonal Antibody (Clone 4C3)

Item No. 15641

Overview and Properties

Contents:	This vial contains 200 µg of ammonium sulfate-purified monoclonal antibody.
Synonyms:	1,4-β-N-Acetylmuramidase C, Lysozyme C Type M
Species Reactivity:	(+) Human lysozyme C, Mouse lysozyme C; other species not tested
Uniprot No.:	P61626
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥3 years
Storage Buffer:	PBS, pH 7.2, with 50% glycerol, 0.5 mg/ml BSA, and 0.02% sodium azide
Clone:	4C3
Host:	Mouse
Isotype:	IgG3
Applications:	Flow cytometry (FC) and immunofluorescence (IF); the recommended starting dilution is 1:50 for FC and IF. Other applications were not attempted and therefore optimal working dilutions should be determined empirically.

Image



Human peripheral blood neutrophils were isolated by density gradient separation and incubated for four hours on 24-well plates in the presence of PMA or A-23187. The resulting extracellular traps were incubated with a 1:50 dilution of the Lysozyme C Monoclonal Antibody (Clone 4C3), followed by incubation with PE labeled goat anti-mouse IgG (H+L)+IgM secondary antibody and fixation with 1% formaldehyde (washed between steps).

Refer to Cayman's Neutrophil Extracellular Trap (NET) Assay Kit booklet (Item No. 601010) for more information regarding protocol.

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

Lysozymes are a critical component of the innate immune system, facilitating the breakdown of bacterial cell walls by catalyzing the hydrolysis of peptidoglycan components. Lysozyme C is a component of many animal secretions such as saliva, tears, and mucus.¹ Elevated serum levels of lysozymes have been associated with rheumatoid arthritis and systemic lupus.² Lysozyme C is a component of neutrophil extracellular traps (NETs), which have the ability to contact and kill pathogens.³ Cayman's Monoclonal Antibody detects lysozyme C in neutrophil-derived NETs.

References

1. Rudney, J.D. and Smith, Q.T. Relationships between levels of lysozyme, lactoferrin, salivary peroxidase, and secretory immunoglobulin A in stimulated parotid saliva. *Infection and Immunity* **49(3)**, 469-475 (1985).
2. Torsteinsdóttir, I., Håkansson, L., Hällgren, R., *et al.* Serum lysozyme: A potential marker of monocyte/macrophage activity in rheumatoid arthritis. *Rheumatology (Oxford)* **38(12)**, 1249-1254 (1999).
3. Urban, C.F., Ermert, D., Schmid, M., *et al.* Neutrophil extracellular traps contain calprotectin, a cytosolic protein complex involved in host defense against *Candida albicans*. *PLoS Pathogens* **5(10)**, 1-18 (2009).

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