

Antibodies

Anti-Human Lysozyme Antibody, Polyclonal

Rabbit polyclonal antibody against human lysozyme, unconjugated



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Catalog #100-1068

100 µL

Product Description

This rabbit polyclonal antibody reacts with lysozyme, a secreted protein found in high concentration in various tissues and fluids, such as liver, articular cartilage, saliva, and tears. Lysozyme performs bacteriolytic functions, hydrolyzing the β -1,4 glycosidic linkages that are found on the peptidoglycan cell walls of various bacteria. Lysozyme also plays an important role in the modulation of pro-inflammatory immune responses. Particularly, the lysozyme-catalyzed degradation of bacteria results in inflammasome activation and macrophage recruitment through cytosolic receptors, like NOD1 and NOD2. In addition to its importance in driving a pro-inflammatory response, lysozyme also plays a role in limiting inflammation by reducing AGE-induced IL-6 production.

Target Antigen Name:	Lysozyme
Alternative Names:	1,4-Beta-N-Acetylmuramidase C, LYZF1, LZM
Gene ID:	4069
Species Reactivity:	Human
Host Species:	Rabbit
Clonality:	Polyclonal
Clone:	Not applicable
Isotype:	Not applicable
Immunogen:	Fusion protein of human LYZ
Conjugate:	Unconjugated

Applications

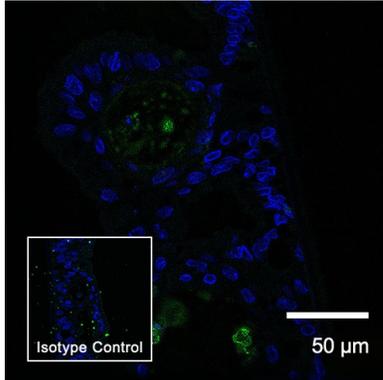
Verified:	ICC/IF
Reported:	IHC
Special Applications:	This antibody has been verified for labeling lysozyme-positive Paneth cells in human intestinal organoids differentiated into monolayer and air-liquid interface (ALI) cultures using IntestiCult™ Organoid Differentiation Medium (Human) (Catalog #100-0214).

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence-activated cell sorting; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IHC-P: Immunohistochemistry (paraffin-embedded); IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

Properties

Formulation:	Phosphate-buffered saline, pH 7.4, containing 0.05% sodium azide and 40% glycerol
Purification:	The antibody was purified by affinity chromatography.
Stability and Storage:	Product stable at -20°C when stored undiluted. Stable until expiry date (EXP) on label.
Directions for Use:	The suggested use of this antibody is: ICC/IF, 2.5 µg/mL; IHC, 1:25 - 1:100. It is recommended that the antibody be titrated for optimal performance for each application.

Data



Primary differentiated intestinal organoid sections from B10 ALI colon lines were deparaffinized and rehydrated with water. The sections went through an antigen retrieval step, were blocked, and then labeled with Anti-Human Lysozyme Antibody, Polyclonal, followed by Goat Anti-Rabbit IgG (H+L) Antibody, Polyclonal, iFluor™ 488 (Catalog #100-1082). Nuclei were counter-stained with DAPI (blue). Inset shows cells labeled with a rabbit IgG isotype control antibody, followed by Goat Anti-Rabbit IgG (H+L) Antibody, Polyclonal, iFluor™ 488 (with DAPI staining).

Related Products

For a complete list of antibodies, including other conjugates, sizes, and clones, as well as related products available from STEMCELL Technologies, visit www.stemcell.com/antibodies, or contact us at techsupport@stemcell.com.

References

1. Ragland SA et al. (2017) From bacterial killing to immune modulation: recent insights into the functions of lysozyme. *PLOS Pathogens* 13(9).
2. Kumamoto H et al. (2001) Immunohistochemical and ultrastructural investigation of apoptotic cell death in granular cell ameloblastoma. *Journal of oral pathology & medicine: official publication of the International Association of Oral Pathologists and the American Academy of Oral Pathology* 30(4): 245–50. (IHC)
3. Yuen S T et al. (1998) Up-regulation of lysozyme production in colonic adenomas and adenocarcinomas. *Histopathology* 32(2): 126–32. (IHC)

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