# abcam

### **Product datasheet**

## Anti-Lysozyme antibody [SP350] - C-terminal ab227708

KO VALIDATED Recombinant RabMAb

#### 11 Images

#### Overview

Product name	Anti-Lysozyme antibody [SP350] - C-terminal	
Description	Rabbit monoclonal [SP350] to Lysozyme - C-terminal	
Host species	Rabbit	
Tested applications	Suitable for: Flow Cyt (Intra), WB, IHC-P, mIHC	
Species reactivity	Reacts with: Human	
Immunogen	Synthetic peptide corresponding to Human Lysozyme (C terminal). Database link: <u>P61626</u>	
Positive control	WB: THP-1, HepG2 and HL-60 whole cell lysate. IHC-P: Human tonsil, lung, liver, spleen, stomach adenocarcinoma and pancreatic adenocarcinoma tissues. Flow Cyt (intra): HL-60 cells. mIHC: Human duodenum tissue.	
General notes	<ul> <li>This product is a recombinant monoclonal antibody, which offers several advantages including:</li> <li>High batch-to-batch consistency and reproducibility</li> <li>Improved sensitivity and specificity</li> <li>Long-term security of supply</li> <li>Animal-free production</li> <li>For more information <u>see here</u>.</li> <li>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <u>RabMAb<sup>®</sup> patents</u>.</li> <li>This product is FOR RESEARCH USE ONLY. For commercial use, please contact</li> </ul>	
	partnerships@abcam.com.	

Properties	
Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.20 Preservative: 0.1% Sodium azide Constituents: 1% BSA, PBS
Purity	Protein A purified

Clonality	Monoclonal
Clone number	SP350
lsotype	lgG

#### Applications

The Abpromise guarantee Our <u>Abpromise guarantee</u> covers the use of ab227708 in the following tested applications.

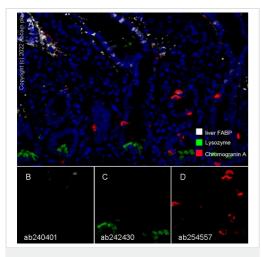
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/100.
WB		1/400. Predicted molecular weight: 16 kDa.
IHC-P		1/100. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 8.0 before commencing with IHC staining protocol.
mIHC		Use at an assay dependent concentration.

Target	

Function	Lysozymes have primarily a bacteriolytic function; those in tissues and body fluids are associated with the monocyte-macrophage system and enhance the activity of immunoagents.
Involvement in disease	Amyloidosis 8
Sequence similarities	Belongs to the glycosyl hydrolase 22 family.
Cellular localization	Secreted.

Images



Multiplex immunohistochemistry - Anti-Lysozyme antibody [SP350] - C-terminal (ab227708)

Fluorescence multiplex immunohistochemical analysis of the human duodenum (Formalin/PFA-fixed paraffin-embedded sections). Panel A: merged staining of anti-liver FABP (ab240401, gray; Opal<sup>™</sup>690), anti-Lysozyme (**ab242430**, green; Opal<sup>™</sup>520) and anti-Chromogranin A (ab254557, red; Opal™570) on human duodenum. Panel B: anti-liver FABP stained on enterocytes. Panel C: anti-Lysozyme stained on Paneth cells. Panel D: anti-Chromogranin A stained on neuroendocrine cells. Opal Polymer HRP Ms + Rb was used as a secondary antibody. The immunostaining was performed on a Leica Biosystems BOND<sup>®</sup> RX instrument with an Opal™ 4-color kit. The section was incubated in three rounds of staining: in the order of ab240401 (1/8000 dilution), ab242430 (1:250 dilution), and ab254557 (1/5000 dilution) for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Leica SP8 confocal microscope.

All lanes : Anti-Lysozyme antibody [SP350] - C-terminal (ab227708) at 1/400 dilution

Lane 1 : Wild-type THP1 cell lysate Lane 2 : LYZ knockout THP1 cell lysate Lane 3 : HepG2 cell lysate Lane 4 : HeLa cell lysate

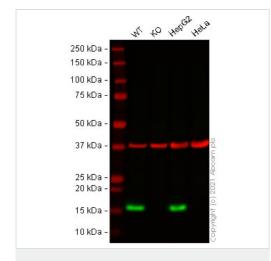
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 16 kDa Observed band size: 16 kDa

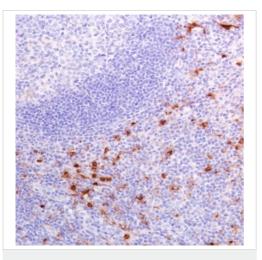
Lanes 1 - 4: Merged signal (red and green). Green - ab227708 observed at 16 kDa. Red - loading control <u>ab8245</u> (Mouse anti-GAPDH antibody [6C5]) observed at 37 kDa.

ab227708 was shown to react with Lysozyme in wild-type THP1 cells in Western blot with loss of signal observed in LYZ knockout sample.Wild-type THP1 and LYZ knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3 % milk in



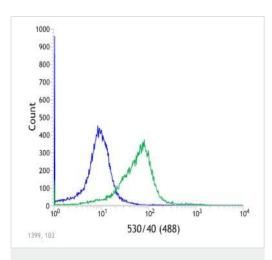
Western blot - Anti-Lysozyme antibody [SP350] - Cterminal (ab227708)

TBS-T (0.1 % Tween<sup>®</sup>) before incubation with ab227708 and **ab8245** (Mouse anti-GAPDH antibody [6C5]) overnight at 4°C at a 1 in 400 dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit IgG H&L (IRDye<sup>®</sup> 800CW) preabsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye<sup>®</sup> 680RD) preabsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 h at room temperature before imaging.



Formalin-fixed, paraffin-embedded human tonsil tissue stained for Lysozyme using ab227708 at 1/100 dilution in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Lysozyme antibody [SP350] - C-terminal (ab227708)



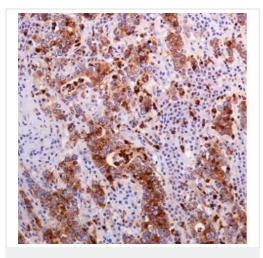
Flow Cytometry (Intracellular) - Anti-Lysozyme antibody [SP350] - C-terminal (ab227708)

Intracellular flow cytometric analysis of HL-60 (human promyelocytic leukemia cell line) cell line labeling Lysozyme with ab227708 at 1/100 dilution (green) compared with a Rabbit IgG negative control (blue).



Western blot - Anti-Lysozyme antibody [SP350] - C-

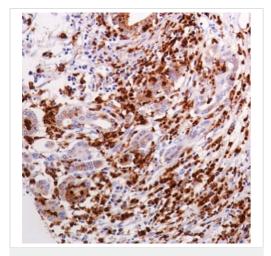
terminal (ab227708)



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Lysozyme antibody [SP350] - C-terminal (ab227708) Anti-Lysozyme antibody [SP350] - C-terminal (ab227708) at 1/400 dilution + HL-60 (human promyelocytic leukemia cell line) cell lysate

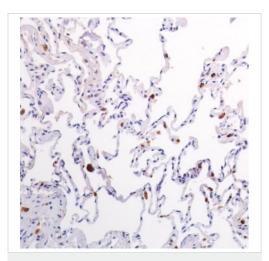
#### Predicted band size: 16 kDa

Formalin-fixed, paraffin-embedded human stomach adenocarcinoma tissue stained for Lysozyme using ab227708 at 1/100 dilution in immunohistochemical analysis.

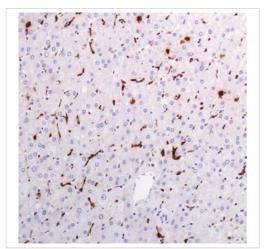


Formalin-fixed, paraffin-embedded human pancreatic adenocarcinoma tissue stained for Lysozyme using ab227708 at 1/100 dilution in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Lysozyme antibody [SP350] - C-terminal (ab227708)

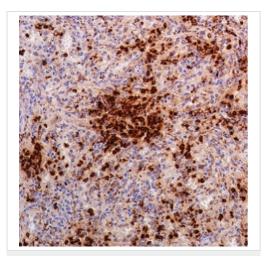


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Lysozyme antibody [SP350] - C-terminal (ab227708) Formalin-fixed, paraffin-embedded human lung tissue stained for Lysozyme using ab227708 at 1/100 dilution in immunohistochemical analysis.



Formalin-fixed, paraffin-embedded human liver tissue stained for Lysozyme using ab227708 at 1/100 dilution in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Lysozyme antibody [SP350] - C-terminal (ab227708)



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Lysozyme antibody [SP350] - C-terminal (ab227708) Formalin-fixed, paraffin-embedded human spleen tissue stained for Lysozyme using ab227708 at 1/100 dilution in immunohistochemical analysis.

Why choose  $\alpha$ recombinant antibody? Research with Long-term and confidence scalable supply Consistent and Recombinant reproducible results technology Success from the Ethical standards first experiment compliant Confirmed Animal-free specificity production Anti-Lysozyme antibody [SP350] - C-terminal

(ab227708)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

#### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <u>https://www.abcam.com/abpromise</u> or contact our technical team.

#### **Terms and conditions**

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors